

NASA TECHNICAL NOTE



NASA TN D-7975 c.1

2.4/4

NASA TN D-7975

LOAN COPY: RETURN
AFWL TECHNICAL LIB
KIRTLAND AFB, N.

0133532



TECH LIBRARY KAFB, NM

4.
LOW ALTITUDE TEMPERATURE
AND HUMIDITY PROFILE DATA
FOR APPLICATION TO
AIRCRAFT NOISE PROPAGATION

*Andrew B. Connor, W. Latham Copeland,
and Danny C. Fulbright*

*Langley Research Center
Hampton, Va. 23665*

3.
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION • WASHINGTON, D. C. • SEPTEMBER 1975





0133532

1. Report No. NASA TN D-7975		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle LOW ALTITUDE TEMPERATURE AND HUMIDITY PROFILE DATA FOR APPLICATION TO AIRCRAFT NOISE PROPAGATION				5. Report Date September 1975	
				6. Performing Organization Code	
7. Author(s) Andrew B. Connor, W. Latham Copeland, and Danny C. Fulbright				8. Performing Organization Report No. L-10117	
9. Performing Organization Name and Address NASA Langley Research Center Hampton, Va. 23665				10. Work Unit No. 505-03-12-01	
				11. Contract or Grant No.	
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, D.C. 20546				13. Type of Report and Period Covered Technical Note	
				14. Sponsoring Agency Code	
15. Supplementary Notes Danny C. Fulbright is a meteorologist with the National Oceanic and Atmospheric Administration at the National Climatic Center, Asheville, North Carolina.					
16. Abstract A data search of the weather statistics from 11 widely dispersed geographical locations within the continental United States has been conducted. The sites, located along both sea-coasts and in the interior, span the northern, southern, and middle latitudes. The weather statistics, retrieved from the records of these 11 sites, consist of two daily observations taken over a 10-year period. The data were sorted with respect to precipitation and surface winds and classified into temperature intervals of 5° C and relative humidity intervals of 10 percent for the lower 1400 meters of the atmosphere. These data were assembled in a statistical format and further classified into altitude increments of 200 meters. The data are presented as sets of tables for each site by season of the year and include both daily observations.					
17. Key Words (Suggested by Author(s)) Acoustics Atmospheric propagation Flyover noise			18. Distribution Statement Unclassified - Unlimited New Subject Category 45		
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 59	22. Price* \$4.25		

LOW ALTITUDE TEMPERATURE AND HUMIDITY PROFILE DATA FOR APPLICATION TO AIRCRAFT NOISE PROPAGATION

Andrew B. Connor, W. Latham Copeland,
and Danny C. Fulbright*
Langley Research Center

SUMMARY

A data search of the weather statistics from 11 widely dispersed geographical locations within the continental United States has been conducted. The sites, located along both seacoasts and in the interior, span the northern, southern, and middle latitudes. The weather statistics, retrieved from the records of these 11 sites, consist of two daily observations taken over a 10-year period. The data were sorted with respect to precipitation and surface winds and classified into temperature intervals of 5° C and relative humidity intervals of 10 percent for the lower 1400 meters of the atmosphere. These data were assembled in a statistical format and further classified into altitude increments of 200 meters. The data are presented as sets of tables for each site by season of the year and include both daily observations.

INTRODUCTION

Both the accuracy and repeatability of aircraft flyover noise measurements and the prediction of aircraft noise contours are strongly influenced by the composition of the lower atmosphere which lies over the flyover acoustic range. These components include small-scale turbulence, wind shears, and the temperature and humidity gradients from the surface of the Earth to an altitude of approximately 1400 meters (refs. 1 to 10). This portion of the atmosphere is the propagation medium of aircraft noise which affects people on the ground.

In selection of an acoustic range for flyover noise measurements the location and time have generally been determined by other than weather factors, such as test airplane availability coinciding with the availability of the airport and adequate support facilities. Other test plan variables such as ambient noise levels, unpredictable weather conditions, and logistic support are then factored into the planning cycle. Extra test days are usually added intuitively to compensate for expected lost time. Except for the weather, the other

*National Oceanic and Atmospheric Administration, National Climatic Center, Asheville, North Carolina.

factors are controllable to some degree. The weather factor was the reason behind this data search, which was an effort to develop planning information for site selection for flyover noise tests when several combinations of temperature and humidity are of interest to the researcher. The purpose of this work, therefore, is to reduce the uncertainty in selecting test sites for a desired set of weather variables.

The data retrieval and subsequent interpretation with respect to meteorological factors were conducted by staff meteorologists with the National Oceanic and Atmospheric Administration (NOAA) at the National Climatic Center (NCC), Asheville, North Carolina. The selection of data applicable to aircraft operations, especially flyover noise measurements, was made by staff members at NASA Langley Research Center. Climatological data are generally analyzed on a large scale by meteorologists and climatologists who have requirements for the weather data and who also acquire the data in the format they prefer. Presentation of existing weather data in altitude increments of 200 meters for this report, therefore, required a special effort from the NCC staff to adapt the data search to their computerized data handling routines. These data are thus somewhat unique because of their low altitude and fine detail presentation, their widely dispersed geographical locations, and the sorting criteria for inclusion of data in the tables (e.g., surface winds below 10 knots, precipitation, and inversions based below an altitude of 1400 meters).

The results of this study are presented as sets of tables showing the frequency of occurrence of temperature and relative humidity combinations at eight atmospheric levels between the surface and 1400 meters and for the daily observations at 0000 and 1200 Greenwich mean time (GMT). The data are sorted by observations of precipitation, surface winds equal to or less than 10 knots, and inversions based below 1400 meters. They are classified into four seasons for each of the 11 sites.

PROCEDURE

Geographical Locations

The selection of geographical locations was based upon identifying locations which generally experienced significantly different seasonal mean temperature and relative humidity combinations. Temperature and humidity variations among sites during a given season are occasionally desired for acoustic testing when a wide range of atmospheric conditions are required. Other factors were variations in local climatology to the extent that several combinations of test conditions might be obtainable at one locale, which would minimize the number of relocations during testing and 10 years of continuous two-a-day observations as a condition for establishing statistical significance. Limiting the selection to the continental United States was arbitrary but was done primarily for logistic reasons.

Eleven locations which met these requirements were selected for purposes of data summarization and are shown in figure 1 with the periods of record. The sites were located along both seacoasts and in the interior United States and extended across the northern, southern, and middle latitudes.

Data Retrieval and Classification

The temperature and relative humidity data for the selected observations included in the tables of this report were based upon examination of radiosonde observations taken from National Climatic Center Card Decks 545 and 645 and Air Force Tape Data Family 54 (TDF54).

The selection of observations for inclusion in the tables was based upon a visual examination of radiosonde observations as plotted on form WBAN-31A. Figure 2 shows an observation plotted on this form. This observation is typical of the approximately 80 000 sounding plots examined by the NCC staff to compile the data for this report. The surface weather conditions are noted on the form at the time of the sounding; that is, the observer records wind speed and direction, precipitation, cloud cover, temperature, relative humidity, and barometric pressure. Temperature inversions based below 1400 meters were also read directly from these plotted forms. The data are reduced and recorded in the table at the upper right of the figure. In the example plot shown in figure 2, the temperature change from the surface (124 meters m.s.l.) to 390 meters m.s.l. exhibits a lapse rate slightly greater than the average lapse rate for the United States (7.2°C/km), as shown in figure 2.3 of reference 11. The lapse is followed by a strong temperature inversion up to 1380 meters, where the temperature has increased from 16.6°C to 26.4°C . Average lapse rate is used for comparison in this case because it is the more typical situation. (See fig. 2.3 in ref. 11.) The average lapse rate is approximately 6°C/km , as compared with the dry adiabatic lapse rate of 9.8°C/km which is the highest rate of cooling with altitude that occurs if no heat is exchanged in the process (ref. 12).

The 0000 GMT and 1200 GMT radiosonde observations for 10 years were scanned for each station and a code was assigned to each observation. The code criteria are as follows:

Code	Description
1	Precipitation with surface wind speed ≤ 10 knots at observation time
2	Surface wind speed > 10 knots with no precipitation at observation time
3	Precipitation with surface wind speed > 10 knots at observation time

Code	Description
4	Inversion based below 1400 meters with no precipitation and surface wind speed ≤ 10 knots at observation time
9	Missing or rejected observation
B	None of the above

One should note that code B, conveniently designated as "None of the above," indicates that these are conditions where the temperature inversions were either based above 1400 meters or may not have existed at all and that there was neither precipitation nor surface winds greater than 10 knots at the time of observation.

The data for the 200-meter increments were obtained by interpolation. Interpolation was done by using data given for the standard pressure levels. The standard pressure levels are the surface, 1000 mbar, 950 mbar, 900 mbar, 850 mbar, 800 mbar, etc. The surface temperature and relative humidity were available directly from the card decks and taped data without interpolation.

Data Analysis

Observations coded with a 4 or a B were used to set up the data with temperature and relative humidity as the variables. Tables were formed for eight levels – surface, 200 meters, 400 meters, 600 meters, 800 meters, 1000 meters, 1200 meters, and 1400 meters. The heights are given as distances above the surface.

The tables show the frequency of occurrence of temperature and relative humidity combinations. For temperature the class interval is 5°C ; for relative humidity the interval is 10 percent. Relative humidities of 100 percent are treated in one class.

In addition to the formation of the tables, frequencies of occurrence of the different codes were computed. These are given at the bottom of each table. They permit a subjective assessment of the probability of encountering weather restrictions. Other information given includes the station elevation in meters, latitude and longitude in degrees and minutes, and the period of record for the data used in each table.

Tables are provided for each of the four seasons for the 0000 GMT and 1200 GMT observations. For purposes of this report, the seasons are defined as follows:

Season	Months
Winter	December, January, and February
Spring	March, April, and May
Summer	June, July, and August
Fall	September, October, and November

RESULTS AND DISCUSSION

The results of this report are a set of tables providing the frequency distribution in the lower atmosphere of temperature and relative humidity combinations classified by location, season of the year, time of day, and altitude. The discussion will describe the data available in the individual tables, as well as data collected together from all the tables in a summary format to provide an overview of the tabular contents. The following discussion, therefore, will be limited to a descriptive example of the tables and how to extract data from a table of particular interest without interpretation.

Summary Data

Because of the large quantity of data contained in the 44 pairs of tables and seven classification codes, summary data for clear days and inversions are provided in tables I and II, respectively, which, it is believed, will be most useful for low altitude flight test planning purposes.

Clear days. - Table I provides a simplified summary of the number of clear days observed at the time of the sounding and the number of total observations at each of the 11 sites. Clear days in this context means no precipitation and surface winds ≤ 10 knots at the time of observation. By this definition, clear days are the sum of all observations encoded 4 and B according to the criteria described in the procedures section. The order of presentation among the sites is by grouping along the east coast, in the midcontinent, and along the west coast. The complete tables of each site, enumerated III to XIII, are indexed in tables I and II.

Examining the data for Norfolk, Virginia, in table I the total number of clear days for the 10-year period was 4434 of 7305 observations or approximately 61 percent. (Note that these numbers represent all the daily observations for all four seasons for the 10-year period.) The data for the summer season show that there were 1334 clear days of 1839 or approximately 73 percent. The summaries indicate, therefore, that the summer season would provide the most opportunities for low altitude flight tests at Norfolk by the clear day criterion. Should there be other criteria more demanding than simply the clear day, then the reader must examine table IV(c) (Norfolk, summer season) for a more detailed assessment of the data.

Similar information is available for the other sites. Should low temperatures be of interest, clear days in winter at the northern latitude sites would be encountered at Glasgow, Montana, approximately 63 percent of the time compared with only 22 percent at Tatoosh Island, Washington. The most probable range of temperatures, however, must be determined by examining the particular table for the site of interest.

Inversions. - Since a normal temperature lapse with altitude is a cooling phenomenon, an increase in temperature with altitude is known as an inversion. The effects of inversions on ground noise measurements from overflying airplanes are currently not well known, and some investigators have argued that inversions are insignificant (ref. 13). But variances among flyover noise measurements when all other parameters are repeatable suggest a possible relationship between inversions and noise data scatter (refs. 1 and 14).

For flyover noise planning purposes for which it would be desirable to estimate the probable occurrence of either inversions or clear days without inversions, inversion occurrence and subsequent lifting can be deduced from the observation data of these tables. Reference 15 discusses inversion frequency from the meteorological and climatological standpoint.

The conditions identified in the data as code B are reproduced in summary table II. The number of clear days indicated by these data is considerably reduced from the numbers indicated in table I. Referring to figure 3, at the bottom of the page for the 1200 GMT data, there were 445 clear day observations (code 4) indicating inversions below 1400 meters and there were 243 days (code B) with no inversions below 1400 meters. Twelve hours later at 0000 GMT, the number of clear days with inversions based below 1400 meters had diminished to 158 (code 4), and the number with no inversions below 1400 meters (code B) had increased to 488. The data indicate that the inversions had lifted during the day, a natural, normally expected occurrence. These data further indicate the normal occurrence of inversion lifting during the 12-hour period from 1200 to 0000 GMT in all but one case - Oakland, summer - where the number under code B was greater at 0000 GMT than at 1200 GMT. Also, the data for Norfolk, Caribou, Glasgow, and Green Bay indicated fairly large increases in code B observations (i.e., lifting of inversions between the morning and evening observations) during the summer season but very little change during winter. Oakland and San Diego, however, were just the opposite. At those sites, the largest changes occurred during the winter season and there was essentially no lifting of inversions during the summer.

Detailed Data Tables

The detailed tables contain a large amount of information for the user. Table IV(c) (Norfolk, Virginia, summer) was chosen as a typical example and is reproduced herein as figure 3 with leaders to several features to identify the significant items provided.

Locale. - The geographic coordinates of the location and the elevation are shown at the top right of each table, and the period of observation is shown at the top left.

Seasons. - There are eight tables for each geographic location, and these are presented in four pairs, one pair per season ((a) winter, (b) spring, (c) summer, and (d) fall). Of each tabular pair, the table on the left side presents data for the observations at 0000 hours GMT, and the table on the right side presents data for observations at 1200 hours GMT. The season and time of observation are printed at both the top and the bottom of each table.

Temperature and humidity as a function of altitude. - The body of the table is divided into altitude levels which are further subdivided into cells containing the number of observations for discrete class combinations of temperature and relative humidity. The sum of all these cell combinations at each altitude level is equal to the total number of accepted observations and is indicated at the lower right corner of each altitude interval. This quantity is equal to the sum of code 4 and code B observations given at the bottom of the table. (Notice that the sum of the rejected observations plus the sum of the analyzed observations is equal to the total number indicated at the very bottom of the table.)

Observation totals. - The setup of this tabular format was to provide a ready reference to the total number of observations such that the reader could readily compare any quantity in the table with the total number of observations to make his own probability estimates.

The example table (fig. 3) shows that at Norfolk, Virginia, for the period August 1955 through July 1965, there were 919 observations at 1200 hours GMT during the 3-month summer season. There were 48 observations of precipitation (28 of code 1 and 20 of code 3) or approximately 5.2 percent of the total observations. There were 198 observations where surface winds exceeded 10 knots (178 of code 2 and 20 of code 3) or approximately 21.5 percent. The remaining number of days (688 days or approximately 74.5 percent) are those which would be classified as clear days (codes 4 and B) and satisfactory for low altitude flight testing provided that the temperature and relative humidity requirements are also satisfied. Five of the possible 919 observations or less than 1 percent were either missing or judged to be unusable (code 9). Thus, the data should be statistically significant for that 10-year period.

The body of the tables was formatted for a statistical treatment of two variables permitting the user to readily calculate a mean and variance of the temperature and relative humidity for a given altitude level. However, such statistical calculations should be interpreted very carefully considering the fact that although the relative humidity classes are divided uniformly into 10 percent intervals for statistical format convenience, atmospheric absorption of moisture as a function of temperature is a logarithmic phenomenon.

CONCLUDING REMARKS

Weather statistics from 10 years of two daily observations have been collected from 11 geographical locations widely dispersed throughout the continental United States. The statistics are presented in tabular format for the lower 1400 meters of the atmosphere to assist in low altitude research flight test planning and noise contour prediction.

Langley Research Center,
National Aeronautics and Space Administration,
Hampton, Va., May 30, 1975.

REFERENCES

1. Hilton, David A.; and Henderson, Herbert R.: Variability in Airplane Noise Measurements. Progress of NASA Research Relating to Noise Alleviation of Large Subsonic Jet Aircraft, NASA SP-189, 1968, pp. 359-368.
2. Little, John W.; Miller, Robert L.; Oncley, Paul B.; and Panko, Raymond E.: Studies of Atmospheric Attenuation of Noise. NASA Acoustically Treated Nacelle Program, NASA SP-220, 1969, pp. 125-136.
3. Chang, David T.: Some Analyses of the Variability of Atmospheric Parameters at Low Altitudes Significant for Aircraft Noise Propagation. NASA CR-1945, 1972.
4. Harris, Cyril M.: Absorption of Sound in Air Versus Humidity and Temperature. NASA CR-647, 1967.
5. Nyborg, Wesley L.; and Mintzer, David: Review of Sound Propagation in the Lower Atmosphere. WADC Tech. Rep. 54-602, U.S. Air Force, May 1955.
6. Noise Standards: Aircraft Type Certification. Federal Aviation Regulations, vol. III, pt. 36, FAA, Dec. 1969.
7. Franken, Peter A.; and Bishop, Dwight E.: The Propagation of Sound From Airport Ground Operations. NASA CR-767, 1967.
8. Bishop, Dwight E.; Simpson, Myles A.; and Chang, David: Experimental Atmospheric Absorption Values From Aircraft Flyover Noise Signals. NASA CR-1751, June 1971.
9. Bishop, Dwight E.: Variability of Flyover Noise Measures for Repeated Flights of Turbojet and Piston Engine Transport Aircraft. NASA CR-1752, 1971.
10. Standard Values of Atmospheric Absorption as a Function of Temperature and Humidity for Use in Evaluating Aircraft Flyover Noise. ARP 866, Soc. of Automot. Eng., Aug. 31, 1964.
11. U.S. Standard Atmosphere Supplements, 1966. Environ. Sci. Serv. Admin., NASA, and U.S. Air Force.
12. Neuberger, Hans H.: Introduction to Physical Meteorology. School of Mineral Industries, Pennsylvania State College, 1951.
13. Thompson, J. R.; and Shapiro, N.: The Effect of Temperature Inversions on Flyover Noise Measurements. Paper presented at Symposium on Atmospheric Acoustics and Noise Propagation, Sept. 1972.

14. Ives, Ronald L.: Apparent Relation of Aircraft Noise to Inversions. Bull. American Meteorol. Soc., vol. 40, no. 3, Mar. 1959, pp. 149-150.
15. Hosler, Charles R.: Low-Level Inversion Frequency in the Contiguous United States. Mon. Weather Rev., vol. 89, no. 9, Sept. 1961, pp. 319-339.

TABLE I.- SUMMARY OF RESULTS FROM ALL OBSERVATIONS FOR 10 YEARS FOR ALL LOCATIONS BY SEASONAL VARIATION
INDICATING THE NUMBER OF OBSERVED SATISFACTORY TEST DAYS

Table	Location of observations	Combined			Winter			Spring			Summer			Fall		
		Total	Clear days ^a	Percent	Total	Clear days ^a	Percent	Total	Clear days ^a	Percent	Total	Clear days ^a	Percent	Total	Clear days ^a	Percent
III	Miami, Fla.	7306	5861	80	1806	1482	82	1840	1357	74	1840	1537	84	1820	1485	82
IV	Norfolk, Va.	7305	4434	61	1806	957	53	1840	982	53	1839	1334	73	1820	1161	64
V	Caribou, Maine	7306	4251	58	1806	875	48	1840	974	53	1840	1256	68	1820	1146	63
VI	Glasgow, Mont.	7306	4359	60	1806	1135	63	1840	978	53	1840	1114	61	1820	1132	62
VII	Green Bay, Wis.	7307	5032	69	1807	1099	61	1840	1156	63	1840	1454	79	1820	1323	73
VIII	Columbia, Mo.	7306	5025	69	1806	1106	61	1840	1011	55	1840	1534	83	1820	1374	75
IX	San Antonio, Tex.	7306	5240	72	1806	1261	70	1840	1138	62	1840	1392	76	1820	1449	80
X	Denver, Colo.	7306	5330	72	1806	1326	73	1840	1197	65	1840	1362	74	1820	1445	79
XI	San Diego, Calif.	7306	6459	88	1806	1604	89	1840	1533	83	1840	1691	92	1820	1631	90
XII	Oakland, Calif.	7306	4773	65	1806	1418	79	1840	1011	55	1840	1046	57	1820	1298	71
XIII	Tatoosh Island, Wash.	7305	2687	37	1806	387	21	1840	720	39	1840	982	53	1819	598	33

^aThe sum of all observations coded 4 and B as defined in the section "Procedures."

TABLE II.- SUMMARY OF CLEAR DAYS AND NO INVERSIONS BASED BELOW
1400 METERS (CODE B) FOR THE ELEVEN SITES

Locations	Winter		Spring		Summer		Fall	
	Time of observations, GMT		Time of observations, GMT		Time of observations, GMT		Time of observations, GMT	
	00	12	00	12	00	12	00	12
Miami	455	119	398	207	543	272	548	181
Norfolk	71	35	255	100	488	243	211	104
Caribou	34	25	253	90	463	159	153	78
Glasgow	57	9	259	57	418	55	276	36
Green Bay	79	31	277	74	521	82	274	106
Columbia	103	18	263	53	609	82	379	61
San Antonio	214	48	316	109	535	303	456	197
Denver	228	25	392	54	480	45	439	36
San Diego	323	51	164	103	22	15	129	44
Oakland	243	117	139	140	13	17	182	60
Tatoosh Island	123	88	203	175	177	138	153	116

TABLE III. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR MIAMI, FLORIDA

(a) Winter

PERIOD: JAN 1959-DEC 1968													ELV: 4 M 25 48N 80 44 W																
SEASON: WINTER (DJF)													SEASON: WINTER (DJF)																
ALTITUDE	AIR TEMP	R E L A T I V E				H U M I D I T Y				TIME (GMT): 00 HR			ALTITUDE	AIR TEMP	R E L A T I V E				H U M I D I T Y				TIME (GMT): 12 HR						
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	OBS	ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	OBS		
(METERS)	(C)	09	19	29	39	49	59	69	79	89	99			(METERS)	(C)	09	19	29	39	49	59	69	79	89	99				
0	5/ 9					1							1	0	0/ 4					1	4	2	5	2			14		
	10/ 14			1	16	7	7	2	4				37		5/ 9						1	28	24	9	1		70		
	15/ 19				7	29	42	49	24	7	4		142		10/ 14						3	10	27	77	119	22			
	20/ 24				1	10	50	124	169	104	12		470		15/ 19						1	12	22	82	54	3	175		
	25/ 29							1	7	22	8		38		20/ 24						1	3	20	36	92	100	24		
	TOTAL		1	24	46	101	182	219	119	16		708		25/ 29													236		
200	5/ 9					1	2	2				6	200	TOTAL					2	9	53	115	280	285	30		774		
	10/ 14			1	19	16	9	11	3			59		0/ 4					2	2	2	4				11			
	15/ 19		3	8	24	66	62	46	9	3		221		5/ 9					5	6	11	17	5	2		47			
	20/ 24					5	26	98	165	118	5	417		10/ 14					6	10	16	36	25	6		103			
	25/ 29					1	3	1				5		15/ 19					3	6	10	16	36	25	6	1	260		
	TOTAL		4	28	47	104	174	216	127	8		708		20/ 24					2	12	39	109	141	49	1	353			
400	0/ 4					1						1	400	TOTAL					1	2	3	21	60	129	241	228	87	2	
	5/ 9			1	5	4						15		0/ 4						3	2	1	1	2	1		10		
	10/ 14			2	14	15	27	20	13			91		5/ 9					1	1	7	11	12	11	5	2	50		
	15/ 19			9	14	36	118	100	43	6		326		10/ 14					1	1	7	22	27	36	17	4	119		
	20/ 24					1	4	55	120	88	7	275		15/ 19		1		1	3	10	21	78	141	105	37	395			
	TOTAL		3	28	34	72	193	234	131	13		708		20/ 24						3	10	21	78	141	105	37	200		
600	0/ 4					1						2	600	TOTAL					1	2	11	26	59	124	247	241	63	774	
	5/ 9			3	5	7	4	5	1	1		26		0/ 4					1	3	1	2	1			8			
	10/ 14		1	1	11	21	22	40	36	10		142		5/ 9					2	5	2	4	10	9	13	6	2	53	
	15/ 19		1	2	3	5	23	89	156	104	28	411		10/ 14		2	5	6	10	12	43	59	21	4		162			
	20/ 24			1	1	1	11	26	49	34	4	127		15/ 19		2	5	5	10	21	51	160	179	57	1	491			
	TOTAL		2	7	21	34	61	160	242	149	32	708		20/ 24					2	5	1	8	18	25	3	60			
800	0/ 4			1		1						2	800	TOTAL					6	16	48	113	251	231	66	1	774		
	5/ 9			5	11	7	5	8	8	3		47		0/ 4					2	2						1	64		
	10/ 14		1	8	9	21	22	41	78	24	3	207		5/ 9		3	6	9	5	5	11	19	5	1		64			
	15/ 19		1	1	4	7	22	92	152	122	21	422		10/ 14		2	5	11	16	34	41	79	34	9		231			
	20/ 24			1		1	5	7	9	7		30		15/ 19					6	9	11	25	60	153	153	39	1	457	
	TOTAL		2	16	24	37	54	148	247	156	24	708		20/ 24						5	19	31	32	66	114	259	198	49	1
1000	0/ 4			1	2							5	1000	TOTAL		5	19	31	32	66	114	259	198	49	1		774		
	5/ 9			7	9	9	8	6	15	17	8	80		0/ 4		1			1	2						1	8		
	10/ 14		4	12	5	13	15	39	103	69	16	276		5/ 9		9	14	6	3	8	7	21	16	3		87			
	15/ 19		5	7	3	10	26	64	99	87	32	340		10/ 14		7	17	18	13	20	42	82	88	28	1	310			
	20/ 24			1	1	1	1	3				7		15/ 19		7	12	10	16	20	61	106	101	29		362			
	TOTAL		17	31	18	38	49	122	219	164	49	1	708		20/ 24														
1200	0/ 4			1	2	2						8	1200	TOTAL		24	43	35	32	50	110	213	205	61	1		774		
	5/ 9			10	10	13	9	11	14	25	14	3	109		0/ 4					1	2	1				2	8		
	10/ 14			10	12	8	19	23	65	87	77	27	329		5/ 9		12	18	10	6	14	17	23	22	3		125		
	15/ 19			7	3	5	16	42	51	68	56	14	262		10/ 14		13	18	17	15	46	59	110	83	33		394		
	20/ 24													15/ 19		13	4	9	15	22	53	70	51	10		247			
	TOTAL		28	27	28	44	76	131	181	148	44	1	708		20/ 24		38	40	37	38	83	129	205	158	46		774		
1400	-5/ -1											1	1400	TOTAL		48	60	64	67	70	123	144	144	54			774		
	0/ 4			1	3					3	3	1	11		0/ 4					1	1	4	1			1	10		
	5/ 9			15	18	14	14	8	11	25	32	10	147		5/ 9		16	24	18	14	6	16	24	25	12		155		
	10/ 14			15	23	18	36	31	57	97	88	32	397		10/ 14		23	32	30	35	45	71	93	99	37		465		
	15/ 19			4	3	11	21	29	27	29	24	4	152		15/ 19		8	3	15	17	19	36	23	19	4		144		
	TOTAL		35	47	43	71	68	95	155	147	47	708		TOTAL		48	60	64	67	70	123	144	144	54			774		
ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL		
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	OBS	OBS	ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	OBS	OBS		
(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)											(%)	(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)											(%)		
SEASON: WINTER (DJF)		TIME (GMT): 00 HR												SEASON: WINTER (DJF)		TIME (GMT): 12 HR													
FREQUENCY OF WEATHER (CODE) FOR WINTER-00 HR														FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR															
1	2	3	4											1	2	3	4												
31	139	13	251										903	31	81	12	655										903		

(b) Spring

ELV: 4 M 25 48N, 80 44 W

SEASON: SPRING (MAM)														SEASON: SPRING (MAM)																		
ALTITUDE		AIR TEMP		R E L A T I V E H U M I D I T Y (%)										TIME (GMT): 00 HR		ALTITUDE		AIR TEMP		R E L A T I V E H U M I D I T Y (%)										TIME (GMT): 12 HR		
ABV SFC	INTERVAL	(C)	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ABV SFC	INTERVAL	(C)	00	10	20	30	40	50	60	70	80	90	100	TOTAL			
(METERS)			09	19	29	39	49	59	69	79	89	99		OBS	(METERS)			09	19	29	39	49	59	69	79	89	99		OBS			
0	10/ 14					1								1	0	0/ 4													1			
	15/ 19					5	6	9	6		3			5		5/ 9							1	1	2	6				10		
	20/ 24				1	7	20	45	60	36	30	19		218		10/ 14						2	1	1	8	17	13			53		
	25/ 29			1	2	8	44	122	114	26	1			318		15/ 19						1	5	14	34	54	71	4		53		
	30/ 34							1	2					3		20/ 24						9	30	90	162	184	11		492			
	TOTAL			2	11	34	99	190	150	59	20			565		25/ 29							3	19	25	7				54		
200	10/ 14					2	1	1	2					6		TOTAL						3	15	5/ 162	265	275	10		792			
	15/ 19					3	7	16	8	3				6		5/ 9						1	3	3						7		
	20/ 24					1	4	18	44	117	33	72	6	392		10/ 14						1	1	3	2	5	13	3			31	
	25/ 29					4	4	18	48	48	10			128		15/ 19						9	17	45	37	30	12			63		
	TOTAL			1	9	30	79	175	181	84	6			565		20/ 24						1	1	24	68	194	262	63		577		
400	5/ 9					1								1		25/ 29							3	11	11	1				26		
	10/ 14					4	5	4						13		5/ 9						1	2	4	13	46	132	248	269	76	1	792
	15/ 19				1	3	11	15	34	15	12	2		93		10/ 14						4	1	1	3	1					32	
	20/ 24					6	14	47	116	142	93	11		429		15/ 19						1	1	1	3	8	6	11	1		1	10
	25/ 29					2	11	9						29		20/ 24						1	1	5	9	21	69	89	57	14	1	267
	TOTAL																															

TABLE III. - Continued

(c) Summer

PERIOD: JAN 1959-DEC 1968

ELV: 4 M 25 48N, 80 44 W

SEASON: SUMMER (JJA)	ALTITUDE	AIR TEMP	ABV SFC	INTERVAL	R E L A T I V E	H U M I D I T Y	TIME (GMT):	00 HR	TOTAL
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99	(C)	09 19 29 39 49 59 69 79 89 99	(%)	00 10 20 30 40 50 60 70 80 90 100	(%)	085	
0	20/ 24					5 17 13		35	
	25/ 29					1 8 154 275 95 6		539	
	30/ 34					1 23 69 14		107	
	TOTAL					2 31 223 294 112 19		681	
200	20/ 24					1 12 21 5		39	
	25/ 29					1 12 165 384 78 1		641	
	30/ 34					1		1	
	TOTAL					1 12 167 396 99 6		681	
400	20/ 24					1 12 106 84 7		210	
	25/ 29					1 11 112 272 75 1		471	
	TOTAL					1 11 124 378 159 8		681	
600	20/ 24					3 8 69 272 217 35		604	
	25/ 29					1 10 36 23 7		77	
	TOTAL					4 18 105 295 224 35		681	
800	15/ 19					1 2 3 3		9	
	20/ 24					6 33 147 312 159 14		671	
	25/ 29					1		1	
	TOTAL					6 34 148 314 162 17		681	
1000	15/ 19					6 20 28 11		65	
	20/ 24					4 14 76 169 224 113 16		616	
	TOTAL					4 14 76 175 244 141 27		681	
1200	15/ 19					1 5 15 54 113 77 19		285	
	20/ 24					5 26 80 123 122 36 4		396	
	TOTAL					6 31 95 177 235 113 23		681	
1400	15/ 19					3 25 73 154 220 101 21		598	
	20/ 24					1 6 16 30 22 7 1		83	
	TOTAL					1 9 41 103 176 227 102 21		681	

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SUMMER (JJA) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR
 1 2 3 4 9 8 TOTAL
 83 143 12 138 1 543 920

SEASON: SUMMER (JJA)	ALTITUDE	AIR TEMP	ABV SFC	INTERVAL	R E L A T I V E	H U M I D I T Y	TIME (GMT):	12 HR	TOTAL
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99	(C)	09 19 29 39 49 59 69 79 89 99	(%)	00 10 20 30 40 50 60 70 80 90 100	(%)	085	
0	20/ 24					2 4 65 201 19		291	
	25/ 29					3 113 312 137		565	
	TOTAL					5 117 377 338 19		856	
200	20/ 24					5 41 96 32		174	
	25/ 29					1 12 283 337 49		682	
	TOTAL					1 17 324 433 81		856	
400	20/ 24					17 201 325 70		613	
	25/ 29					12 118 109 4		243	
	TOTAL					29 319 434 74		856	
600	15/ 19					2 1 1		4	
	20/ 24					6 49 289 368 130 1		843	
	25/ 29					1 2 5 1		9	
	TOTAL					7 51 296 370 131 1		856	
800	15/ 19					4 9 9 1		23	
	20/ 24					13 79 364 323 54		833	
	TOTAL					13 83 373 332 55		856	
1000	15/ 19					5 17 54 66 22		164	
	20/ 24					1 5 41 114 315 181 35		692	
	TOTAL					1 5 46 131 369 247 57		856	
1200	15/ 19					3 3 19 129 258 164 31		607	
	20/ 24					11 40 87 81 29 1		249	
	TOTAL					3 14 59 216 339 193 32		856	
1400	10/ 14					2		2	
	15/ 19					3 5 24 74 225 318 158 21		828	
	20/ 24					2 9 7 6 2		26	
	TOTAL					3 7 33 81 231 322 158 21		856	

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SUMMER (JJA) TIME (GMT): 12 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR
 1 2 3 4 9 8 TOTAL
 33 21 7 584 3 272 920

TABLE III. - Concluded

(d) Fall

PERIOD: JAN 1959-DEC 1968

ELV: 4 M 25 48N 80 44 W

SEASON: FALL (SQN)	TIME (GMT): 00 HR														00 HR
ALTITUDE	AIR TEMP	R E L A T I V E	H U M I D I T Y	(%)	TOTAL	TOTAL									
ABV SFC	INTERVAL	00 10 20 30 40 50 60 70 80 90 100	DBS	DBS	DBS	DBS									
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99													
0	10/ 14		1	1		2									
	15/ 19		1	3	7 5 2 2	21									
	20/ 24			3	27 54 54 27 14	179									
	25/ 29			3	21 117 222 99 11	473									
	30/ 34				6 5 2	13									
	TOTAL		2	10	61 181 280 128 26	688									
200	10/ 14		1	2	1 1	5									
	15/ 19		3	1	8 7 3 4 2	28									
	20/ 24			5	32 83 107 53 4	284									
	25/ 29		1	3	5 64 218 74 6	371									
	TOTAL		5	11	45 155 329 131 12	688									
400	10/ 14		1	2	1 2 1	9									
	15/ 19		3	4	6 27 7 3 3	53									
	20/ 24			5	22 89 168 122 15	421									
	25/ 29			1	2 25 118 58 1	205									
	TOTAL		4	12	31 143 294 185 19	688									
600	10/ 14		1	2	3 3 3 2 1	18									
	15/ 19		1	5	6 47 46 28 7	140									
	20/ 24			5	16 58 202 187 36	504									
	25/ 29				1 7 14 4	26									
	TOTAL		2	13	26 115 265 221 44	688									
800	5/ 9				1	2									
	10/ 14			2	2 1 3 13 4	27									
	15/ 19		2	2	13 49 90 50 16	224									
	20/ 24			5	10 68 195 142 14	434									
	25/ 29				1	1									
	TOTAL		5	4	9 24 120 300 196 30	688									
1000	5/ 9				3 1	6									
	10/ 14		1	4	7 23 9 2	47									
	15/ 19		3	1	1 5 18 61 112 80 36	317									
	20/ 24			2	2 15 60 140 85 14	318									
	TOTAL		4	6	3 9 33 128 278 175 52	688									
1200	5/ 9		1	1	2 2 1	7									
	10/ 14		3	3	1 1 9 26 40 18 6	108									
	15/ 19		2	1	2 11 29 75 162 111 26	419									
	20/ 24			1	1 10 46 63 26 5	154									
	TOTAL		6	5	5 13 48 149 267 156 37 2	688									
1400	5/ 9		1	1	3 3	9									
	10/ 14		8	5	6 9 16 21 57 33 11	1 167									
	15/ 19		1	4	11 20 33 96 187 117 28	1 498									
	20/ 24			1	1 2 6 2 1 1	14									
	TOTAL		10	10	18 30 52 123 249 154 40 2	688									

SEASON: FALL (SQN)	TIME (GMT): 00 HR														00 HR
ABV SFC	AIR TEMP	R E L A T I V E	H U M I D I T Y	(%)	TOTAL	TOTAL									
(METERS)	(C)	00 10 20 30 40 50 60 70 80 90 100	DBS	DBS	DBS	DBS									
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99													

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)

SEASON: FALL (SQN) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR
 1 2 3 4 9 8 TOTAL
 55 139 20 140 8 548 910

SEASON: FALL	(SQN)										TIME (GMT)										12 HR	
ALTITUDE	AIR TEMP	R E L A T I V E										H U M I D I T Y										(%)
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	TOTAL									
(METERS)	(C)	09	19	29	39	49	59	69	79	89	99		DBS									
0	5/ 9							1	1	2	3		7									
	10/ 14								4	2	9	11	26									
	15/ 19								4	9	52	54	125									
	20/ 24							1	10	29	128	250	438									
	25/ 29								2	26	115	58	201									
	TOTAL							2	21	68	307	373	797									
200	5/ 9							2	1	1			4									
	10/ 14						2	1	1	9	1	1	15									
	15/ 19					1		5	8	19	23	9	65									
	20/ 24						3	15	49	131	174	78	450									
	25/ 29								8	86	129	40	263									
	TOTAL					1	5	23	67	246	327	128	797									
400	5/ 9								2	2	2	9	17									
	10/ 14								1	1	8	30	43									
	15/ 19								2	7	42	178	282									
	20/ 24										5	23	36									
	25/ 29										1	8	17									
	TOTAL					1	8	17	79	254	345	93	797									
600	5/ 9												21									
	10/ 14								1		5	3	6									
	15/ 19								1	2	3	15	35									
	20/ 24								3	10	38	173	248									
	25/ 29												2									
	TOTAL								3	2	7	31	78									
800	5/ 9								1		1	2	1									
	10/ 14								3	2	5	13	10									
	15/ 19								1	2	7	18	48									
	20/ 24									3	13	41	152									
	TOTAL								2	5	13	38	102									
1000	5/ 9								1				2									
	10/ 14								2	4	2	3	4									
	15/ 19								1	1	5	11	30									
	20/ 24									3	4	5	10									
	TOTAL								3	8	12	19	44									
1200	5/ 9								1	2	1		1									
	10/ 14								4	4	5	8	17									
	15/ 19								1	5	8	23	31									
	20/ 24								1		1	4	3									
	TOTAL								6	9	15	37	52									
1400	5/ 9									2	2	1										
	10/ 14												1									
	15/ 19									3	10	15	20									
	20/ 24										1	3	1									
	TOTAL								10	23	32	33	71									

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)

SEASON: FALL (SQN) TIME (GMT): 12 HR

FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR
 1 2 3 4 9 8 TOTAL
 44 56 8 616 5 181 910

(b) Spring

ELV: 9 M 36 53N, 76 12 W

[illegible]

FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR						
1	2	3	4	9	8	TOTAL
40	325	40	253	7	255	920

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR						
1	2	3	4	9	8	TOTAL
46	345	53	374	2	100	920

(c) Summer

ELV: 9 M 36 53N, 76 12 W

19

TABLE IV.- Concluded

(d) Fall

PERIOD: AUG 1955-JULY 1965

ELV: 9 M 36 53N, 76 12 W

SEASON: FALL (SDN)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	00 HR
ABV SFC	INTERVAL	(C)	09 10 20 30 40	50 60 70 80 90 100	(%)	TOTAL
(METERS)			09 19 29 39 49	59 69 79 89 99		085
0	-5/-1			1 1		2
	0/4		1 2	1 1 3 4		12
	5/9		6 10 12 12 8 2			50
	10/14		4 12 22 27 30 31 7		1	134
	15/19		1 7 20 22 60 35 22		2	169
	20/24		2 6 14 36 53 33 21			165
	25/29		1 2 6 19 32 13 4			77
	30/34			2 1 1		4
	TOTAL		9 35 76 119 191 124 56		3	613
200	0/4		2 4 1 3			10
	5/9		1 3 9 15 5 4 4 2			43
	10/14		1 13 21 28 33 26 8 3			133
	15/19		12 22 25 30 39 30 12			190
	20/24		3 3 14 24 38 47 35 8			172
	25/29		1 4 10 18 23 8			64
	30/34			1		1
	TOTAL		6 33 74 103 148 139 85 25			613
400	-5/-1			1		1
	0/4		1 2 6 5 2			16
	5/9		2 7 15 15 7 10 4 1			61
	10/14		2 10 29 34 30 23 11 3			140
	15/19		4 11 25 30 47 50 28 9			204
	20/24		2 2 14 23 39 40 32 7			159
	25/29		1 5 14 11 1			32
	TOTAL		10 32 90 112 139 134 76 20			613
600	-5/-1		1 1 2 1			5
	0/4		3 1 6 7 7 5			27
	5/9		3 10 20 11 14 12 4 1			75
	10/14		1 8 14 20 30 32 21 11 5			142
	15/19		3 4 9 34 27 43 56 30 9			215
	20/24		1 3 7 19 34 41 22 6			133
	25/29			1 6 3 6		16
	TOTAL		4 17 38 90 101 133 141 67 22			613
800	-5/-1		1 1 2 2			8
	0/4		1 3 12 8 1			32
	5/9		1 5 8 22 20 18 12 6 1			93
	10/14		2 6 22 29 29 39 20 13 7			167
	15/19		3 8 11 17 25 52 46 30 9			201
	20/24		1 1 9 11 32 37 15 2			108
	25/29			1 1 2		4
	TOTAL		6 21 46 92 94 152 118 64 20			613
1000	-10/-6			1		1
	-5/-1		1 1 1 3 1			11
	0/4		5 9 11 18 15 22 16 4 2			102
	5/9		8 19 11 32 20 34 43 21 11			199
	10/14		12 7 11 7 22 49 42 29 8			187
	15/19		2 3 5 8 22 26 7			73
	20/24		26 41 41 75 80 135 130 63 22			613
	TOTAL					3
1200	-10/-6		1 1 1 1			15
	-5/-1		1 2 4 1 2 2 3			43
	0/4		5 2 4 11 8 8 4			111
	5/9		13 8 12 22 15 20 15 5 1			224
	10/14		22 12 26 16 37 45 39 18 9			182
	15/19		12 7 9 10 24 41 42 31 5			35
	20/24		2 1 3 4 12 12 1			5
	TOTAL		53 33 56 64 91 129 115 55 16			613
1400	-10/-6		1 1 1 2			15
	-5/-1		4 1 1 2 3 3 1			51
	0/4		5 5 7 7 8 10 5 2 2			128
	5/9		18 19 21 16 11 25 10 7 1			235
	10/14		29 20 32 22 28 34 36 24 10			12
	15/19		10 13 13 15 16 35 41 20 3			167
	20/24			1 5 4 1		12
	TOTAL		66 58 75 61 67 113 101 55 16			613

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)

SEASON: FALL (SDN) TIME (GMT): 00 HR
 FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR
 1 2 3 4 9 8 TOTAL
 32 192 51 402 22 211 910

SEASON: FALL (SDN)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	12 HR
ABV SFC	INTERVAL	(C)	00 10 20 30 40	50 60 70 80 90 100	(%)	TOTAL
(METERS)			09 19 29 39 49	59 69 79 89 99		085
0	-5/-1			2 2		7
	0/4		1 5 3 3	3 12 10 4		36
	5/9		1 6 7 22 18 35 8			94
	10/14		1 1 6 6 19 28 47 10			117
	15/19		1 2 10 6 19 36 66 19			155
	20/24		1 1 5 7 15 28 67 4			127
	25/29		1 4 1 3 2 1			11
	30/34			1		1
	TOTAL		2 5 35 33 81 125 228 39			548
200	-5/-1			2 1		3
	0/4		1 2 5 9 1 1			19
	5/9		1 9 11 18 15 6			59
	10/14		1 14 16 21 30 22 2			106
	15/19		1 2 10 25 30 59 38 19			184
	20/24		5 5 17 41 77 22			167
	25/29		1 3 3 2 1			10
	TOTAL		1 4 41 67 96 149 146 44			548
400	-5/-1			3 1		4
	0/4		1 2 11 7 1			22
	5/9		3 8 18 16 17 3			65
	10/14		8 15 24 26 24 19 1			117
	15/19		1 7 16 26 46 40 42 9			187
	20/24		5 10 24 33 60 15			147
	25/29		1 3 1 1			6
	TOTAL		2 21 44 95 121 116 124 25			548
600	-10/-6			2 3		8
	-5/-1		1 1 2 10 8 3 1			27
	0/4		1 1 4 15 14 20 10 2			67
	5/9		1 6 12 9 30 24 33 1 3			135
	10/14		9 9 19 23 30 48 45 7			190
	15/19		3 6 12 27 23 38 7			116
	20/24		1 1 1 1			4
	25/29		2 20 29 54 91 114 118 103 17			548
	TOTAL					2
800	-10/-6			3 4 2		10
	-5/-1		1 1 2 6 9 9 1			29
	0/4		5 7 21 14 18 5 3			73
	5/9		3 4 15 25 37 27 32 18 6			167
	10/14		1 9 10 16 24 36 47 37 9			189
	15/19		1 1 1 1 10 17 27 1			76
	20/24					2
	25/29		5 21 35 74 100 110 102 85 16			548
	TOTAL					2
1000	-10/-6			1 1		15
	-5/-1		1 2 4 1 4 5 2 2			32
	0/4		2 4 14 17 15 14 11 4			86
	5/9		7 15 19 18 29 28 33 25 8			182
	10/14		5 7 11 13 22 32 42 38 8			178
	15/19		1 2 6 8 8 14 14			53
	20/24		16 37 51 63 88 92 104 81 16			548
	TOTAL					2
1200	-10/-6			1 1		19
	-5/-1		1 1 5 4 3 5 5 1			39
	0/4		4 3 3 12 5 6 5			98
	5/9		6 13 18 16 14 14 10 7			197
	10/14		14 14 16 22 32 31 37 25 6			175
	15/19		9 7 10 11 21 35 42 34 6			18
	20/24		1 3 3 4 5 2			548
	TOTAL		34 39 52 69 78 95 100 69 12			2
1400	-10/-6			1 1		18
	-5/-1		1 6 1 4 2 4 1			47
	0/4		5 8 8 3 8 7 4 4			123
	5/9		13 24 14 14 19 16 15 7 1			210
	10/14		17 21 24 16 24 37 36 32 3			141
	15/19		9 7 5 13 14 28 35 26 4			7
	20/24		1 1 1 1			548
	TOTAL		45 67 53 52 68 93 93 69 8			

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)

SEASON: FALL (SDN) TIME (GMT): 12 HR
 FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR
 1 2 3 4 9 8 TOTAL
 37 254 57 444 14 104 910

(a) Winter

ELV: 191 M 46 52N, 68 01 W

[illegible]

(b) Spring

ELV: 191 M 46 52N, 68 01 W

SEASON1 SPRING (MAM)														SEASON2 SPRING (MAM)																												
ALTITUDE		AIR TEMP		R E L A T I V E H U M I D I T Y										TIME (GMT):		00 HR		ALTITUDE		AIR TEMP		R E L A T I V E H U M I D I T Y										TIME (GMT):		12 HR								
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	TOTAL	
(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	DBS		(METERS)	(C)	09	19	29	39	49	59	69	79	89	99		(METERS)	(C)	09	19	29	39	49	59	69	79	89	99				
0	-15/-11				1	5	1	1		1		9		0	-30/-26						3	1						7														10
	-10/-6				2	4	6	6		5	1	2	24			-20/-16					1	2	4	3				23													23	
	-5/-1				3	7	24	19	21	9	11	1	95			-15/-11					2	6	7	12	13	1		41													41	
	0/4				4	16	28	28	16	13	12	6	123			-10/-6					1	3	9	17	15	5		50												50		
	5/9				6	18	13	7	6	4	7	4	65			-5/-1					2	12	27	32	17			90												90		
	10/14				11	16	13	4	5	2	3	1	25			0/4					1	3	9	17	15	5		172												172		
	15/19				2	4	12	4	2				34			5/9					1	9	17	16	19	21	1	184												184		
	20/24				1	1	2						25			10/14					2	9	17	16	19	21	1	41												41		
	25/29				2	26	70	82	66	57	39	24	449			15/19												2													2	
	TOTAL				2	26	70	82	66	57	39	24	449			20/24												8													8	
200	-15/-11				3	4							9		200	-25/-21					6	39	98	134	142	102	4	525													525	
	-10/-6				4	11	4	6	3				28			-20/-16												2												2		
	-5/-1				3	10	12	14	11	5	2		37			-15/-11												3												3		
	0/4				2	7	21	21	19	14	9	11	104			-10/-6					4	7	6	11	10	3		17												17		
	5/9				11	23	33	14	14	14	6	5	120			-5/-1					5	8																				

TABLE V. - Continued

(c) Summer

PERIOD: JAN 1959-DEC 1968

ELV: 191 M 46 52N 68 01 W

SEASON: SUMMER (JJA)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 00 HR	TOTAL
ABV SFC	INTERVAL	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	OBS
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	OBS
0	5/ 9					3
10/ 14	5/ 9					40
15/ 19	3	9	25	34	30	41
20/ 24	6	16	52	77	56	43
25/ 29	2	15	13	15	8	7
30/ 34	1	1	1	1	1	1
TOTAL	11	43	93	131	102	101
200	5/ 9					2
10/ 14	3	10	11	12	16	12
15/ 19	5	17	49	52	46	37
20/ 24	2	17	57	59	38	25
25/ 29	2	16	6	11	2	3
TOTAL	9	53	122	133	99	81
400	5/ 9					2
10/ 14	1	4	23	22	17	21
15/ 19	7	25	76	58	40	40
20/ 24	2	16	49	30	26	13
25/ 29	4	7	7	4	1	1
TOTAL	14	52	155	116	86	76
600	5/ 9					3
10/ 14	3	12	25	47	37	23
15/ 19	3	18	69	61	45	40
20/ 24	5	7	22	25	14	7
25/ 29	2	3	2	2	2	2
TOTAL	11	40	123	138	103	77
800	0/ 4					1
5/ 9	2	1	5	8	14	15
10/ 14	4	15	36	58	53	27
15/ 19	2	9	51	59	53	30
20/ 24	4	8	13	12	6	4
TOTAL	12	33	105	137	127	76
1000	0/ 4					1
5/ 9	3	3	8	14	29	18
10/ 14	6	14	39	75	63	40
15/ 19	8	24	44	47	23	18
20/ 24	2	6	4	5	3	3
TOTAL	11	31	75	139	143	87
1200	0/ 4					1
5/ 9	1	6	3	15	34	44
10/ 14	8	8	35	67	59	35
15/ 19	3	6	13	23	25	23
20/ 24	1	18	18	63	130	135
TOTAL	1	18	18	63	130	135
1400	-5/ -1					1
0/ 4	2	1	1	7	7	18
5/ 9	3	4	5	20	46	60
10/ 14	1	9	7	19	51	56
15/ 19	2	4	9	16	12	12
TOTAL	4	17	17	49	120	135

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SUMMER (JJA) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR
 1 2 3 4 9 8 TOTAL
 73 226 29 125 4 463 920

SEASON: SUMMER (JJA)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 12 HR	TOTAL
ABV SFC	INTERVAL	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	OBS
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	OBS
0	0/ 4					1
5/ 9	5/ 9					6
10/ 14	1	6	19	44	100	123
15/ 19	1	5	16	19	66	125
20/ 24	1	1	1	4	8	9
25/ 29	1	2	12	41	81	200
TOTAL	1	2	12	41	81	200
200	0/ 4					1
5/ 9	2	7	16	17	22	10
10/ 14	1	9	21	65	86	66
15/ 19	3	18	49	59	68	59
20/ 24	1	3	8	8	6	2
25/ 29	1	13	49	138	170	162
TOTAL	1	13	49	138	170	162
400	0/ 4					1
5/ 9	1	3	11	13	9	14
10/ 14	4	10	38	56	48	43
15/ 19	3	7	28	41	54	57
20/ 24	1	4	8	5	12	7
25/ 29	1	1	1	1	1	1
TOTAL	9	25	85	116	123	122
600	0/ 4					1
5/ 9	1	6	13	19	18	17
10/ 14	1	3	13	51	68	42
15/ 19	4	8	29	44	53	44
20/ 24	1	4	3	6	4	7
25/ 29	1	9	31	96	139	122
TOTAL	1	9	31	96	139	122
800	0/ 4					1
5/ 9	4	6	25	33	31	24
10/ 14	2	3	21	52	60	39
15/ 19	4	8	32	42	46	28
20/ 24	1	4	2	6	2	2
25/ 29	2	12	39	111	146	118
TOTAL	2	12	39	111	146	118
1000	0/ 4					1
5/ 9	1	1	5	11	3	9
10/ 14	4	9	32	46	40	26
15/ 19	2	4	16	44	68	59
20/ 24	2	6	23	27	29	21
25/ 29	2	11	34	104	155	133
TOTAL	2	11	34	104	155	133
1200	-5/ -1					1
0/ 4	3	1	7	12	14	12
5/ 9	6	17	34	58	51	32
10/ 14	2	6	12	32	64	57
15/ 19	3	7	13	19	21	15
20/ 24	1	1	1	1	1	1
25/ 29	2	18	38	86	154	146
TOTAL	2	18	38	86	154	146
1400	-5/ -1					1
0/ 4	2	3	13	16	24	16
5/ 9	3	9	19	38	72	53
10/ 14	4	6	12	29	51	54
15/ 19	1	2	5	7	8	10
20/ 24	8	19	39	87	148	143
TOTAL	8	19	39	87	148	143

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SUMMER (JJA) TIME (GMT): 12 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR
 1 2 3 4 9 8 TOTAL
 100 128 17 509 7 159 920

(d) Fall

ELV: 191 M 46 52N, 68 01 W

[illegible]

FREQUENCY OF WEATHER (CODE) FOR FALL							-00 HR
1	2	3	4	9	8	TOTAL	
1	2	3	4	9	8	TOTAL	

FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR						
1	2	3	4	9	8	TOTAL
1	1	1	1	1	1	6
2	1	1	1	1	1	6
3	1	1	1	1	1	6
4	1	1	1	1	1	6
5	1	1	1	1	1	6
6	1	1	1	1	1	6
7	1	1	1	1	1	6
8	1	1	1	1	1	6
9	1	1	1	1	1	6
10	1	1	1	1	1	6
11	1	1	1	1	1	6
12	1	1	1	1	1	6
13	1	1	1	1	1	6
14	1	1	1	1	1	6
15	1	1	1	1	1	6
16	1	1	1	1	1	6
17	1	1	1	1	1	6
18	1	1	1	1	1	6
19	1	1	1	1	1	6
20	1	1	1	1	1	6
21	1	1	1	1	1	6
22	1	1	1	1	1	6
23	1	1	1	1	1	6
24	1	1	1	1	1	6
25	1	1	1	1	1	6
26	1	1	1	1	1	6
27	1	1	1	1	1	6
28	1	1	1	1	1	6
29	1	1	1	1	1	6
30	1	1	1	1	1	6
31	1	1	1	1	1	6
32	1	1	1	1	1	6
33	1	1	1	1	1	6
34	1	1	1	1	1	6
35	1	1	1	1	1	6
36	1	1	1	1	1	6
37	1	1	1	1	1	6
38	1	1	1	1	1	6
39	1	1	1	1	1	6
40	1	1	1	1	1	6
41	1	1	1	1	1	6
42	1	1	1	1	1	6
43	1	1	1	1	1	6
44	1	1	1	1	1	6
45	1	1	1	1	1	6
46	1	1	1	1	1	6
47	1	1	1	1	1	6
48	1	1	1	1	1	6
49	1	1	1	1	1	6
50	1	1	1	1	1	6
51	1	1	1	1	1	6
52	1	1	1	1	1	6
53	1	1	1	1	1	6
54	1	1	1	1	1	6
55	1	1	1	1	1	6
56	1	1	1	1	1	6
57	1	1	1	1	1	6
58	1	1	1	1	1	6
59	1	1	1	1	1	6
60	1	1	1	1	1	6
61	1	1	1	1	1	6
62	1	1	1	1	1	6
63	1	1	1	1	1	6
64	1	1	1	1	1	6
65	1	1	1	1	1	6
66	1	1	1	1	1	6
67	1	1	1	1	1	6
68	1	1	1	1	1	6
69	1	1	1	1	1	6
70	1	1	1	1	1	6
71						

(a) Winter

ELV: 696 M 48 13N, 106 37 W

EASON: WINTER (°F)		AIR TEMP		R E L A T I V E		H U M I D I T Y		TIME (GMT)		12 HR		
ALTITUDE	AIR	00	10	20	30	40	50	60	70	80	90	TOTAL
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	DBS
(FEET)	(°C)	00	10	20	30	40	50	60	70	80	90	DBS
0	-40/-36						2		1			1
	-35/-31								5			3
	-30/-26					2	7	12	28			49
	-25/-21						10	18	14	25		67
	-20/-16					1	1	25	12	27		67
	-15/-11						1	10	21	59	1	107
	-10/-6							1	16	52	45	4
	-5/-1								9	24	41	36
	0/4					1	2	11	19	15		5
	5/9					2	1	1	1			3
	TOTAL					6	25	87	141	219	97	586
200	-35/-31								1			3
	-30/-26					2	3	10				19
	-25/-21					3	14	17	22	2		58
	-20/-16						5	13	31	9	1	59
	-15/-11					1	4	10	25	19	6	66
	-10/-6					1	5	17	20	27	11	81
	-5/-1					2	21	29	48	26	10	137
	0/4					4	21	37	33	14	6	115
	5/9				4	8	18	13	2			45
	10/14		1		1	1						3
	TOTAL		1	4	23	92	147	186	97	34	2	586
400	-35/-31							1	2			3
	-30/-26							1	6	1	2	14
	-25/-21					2	3	10	11			21
	-20/-16					2	4	10	13	17	9	45
	-15/-11						2	5	9	14	12	6
	-10/-6						6	7	17	29	19	8
	-5/-1					2	4	12	28	32	32	10
	0/4					2	4	27	27	35	13	7
	5/9					2	10	23	31	14	3	115
	10/14					1	2	2	3	1		83
	TOTAL		5	24	83	123	140	120	60	23	4	586
600	-35/-31								1	3		4
	-30/-26						2	2	2	3	1	10
	-25/-21						3	5	4	12	9	6
	-20/-16					1	1	8	6	14	11	5
	-15/-11						1	6	7	9	13	9
	-10/-6					1	5	8	14	12	21	17
	-5/-1					2	5	25	37	31	20	6
	0/4					2	10	35	36	20	7	5
	5/9					4	21	37	25	4		117
	10/14					1	2	3	3			91
	TOTAL		13	48	128	135	105	84	49	22	2	586
800	-35/-31									2		2
	-30/-26									1	2	3
	-25/-21					1	4	2	3	11	6	1
	-20/-16						3	6	4	5	7	6
	-15/-11					1	2	2	11	6	12	9
	-10/-6					2	5	5	12	13	16	23
	-5/-1					2	5	8	14	12	21	17
	0/4					1	7	27	25	34	11	5
	5/9					1	11	23	30	23	2	5
	10/14						4	2	2			9
	TOTAL		7	35	87	105	127	85	70	40	25	5
1000	-35/-31									1		2
	-30/-26									1	1	2
	-25/-21									7	8	1
	-20/-16									4	7	5
	-15/-11									11	5	2
	-10/-6									12	9	2
	-5/-1									31	15	4
	0/4									31	11	2
	5/9									3	1	1
	10/14									14	21	17
	TOTAL		9	39	92	111	120	96	62	31	22	4
1200	-35/-31									1		2
	-30/-26									2	2	4
	-25/-21									5	7	1
	-20/-16									4	4	4
	-15/-11									13	17	6
	-10/-6									9	13	15
	-5/-1									25	30	42
	0/4									6	20	34
	5/9									14	21	17
	10/14									1	2	1
	TOTAL		9	39	92	111	120	96	62	31	22	4
1400	-35/-31									1		2
	-30/-26									1	4	3
	-25/-21									4	6	3
	-20/-16									6	7	3
	-15/-11									10	16	4
	-10/-6									13	17	6
	-5/-1									25	30	42
	0/4									6	20	34
	5/9									14	21	17
	10/14									2	7	18
	TOTAL		28	34	88	119	118	83	56	28	23	5
1600	-35/-31									1		2
	-30/-26									1	4	3
	-25/-21									4	6	3
	-20/-16									6	7	3
	-15/-11									10	16	4
	-10/-6									13	17	6
	-5/-1									25	30	42
	0/4									6	20	34
	5/9									14	21	17
	10/14									2	7	18
	TOTAL		31	35	81	116	120	90	55	30	23	5
ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	TOTAL
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	DBS
(FEET)	(°C)	00	10	20	30	40	50	60	70	80	90	DBS

FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR

TABLE VI.- Continued

(b) Spring

PERIOD: JAN 1959-DEC 1968

ELV: 696 M 48 13N, 106 37 W

SEASON: SPRING (MAM)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 00 HR	TOTAL
ABV SFC	INTERVAL	(C)	09 19 29 39 49 59 69 79 89 99	00 10 20 30 40 50 60 70 80 90 100	(%)	OBS
(METERS)						
0	-25/-21				2	2
	-20/-16				4	6
	-15/-11				1	12
	-10/-6				1	8
	-5/-1				2	36
	0/4				10	37
	5/9				19	69
	10/14				11	58
	15/19				16	70
	20/24				4	39
	25/29				1	12
	30/34				2	4
	TOTAL				21	373
200	-25/-21				1	7
	-20/-16				2	9
	-15/-11				3	7
	-10/-6				2	9
	-5/-1				2	37
	0/4				10	75
	5/9				13	65
	10/14				17	71
	15/19				7	65
	20/24				2	19
	25/29				2	8
	30/34				1	1
	TOTAL				19	373
400	-25/-21				1	7
	-20/-16				2	10
	-15/-11				2	18
	-10/-6				1	45
	-5/-1				1	77
	0/4				14	73
	5/9				23	78
	10/14				28	37
	15/19				12	15
	20/24				1	6
	25/29				1	373
	TOTAL				13	63
600	-25/-21				1	8
	-20/-16				2	9
	-15/-11				2	22
	-10/-6				1	63
	-5/-1				1	78
	0/4				6	78
	5/9				13	33
	10/14				18	62
	15/19				7	33
	20/24				1	11
	25/29				2	2
	TOTAL				7	373
800	-25/-21				1	1
	-20/-16				3	8
	-15/-11				1	12
	-10/-6				1	27
	-5/-1				3	79
	0/4				8	75
	5/9				18	85
	10/14				23	54
	15/19				14	18
	20/24				4	6
	25/29				1	1
	TOTAL				6	373
1000	-25/-21				2	1
	-20/-16				1	8
	-15/-11				2	5
	-10/-6				2	17
	-5/-1				3	32
	0/4				12	95
	5/9				23	80
	10/14				23	76
	15/19				14	39
	20/24				4	16
	25/29				1	6
	TOTAL				6	373
1200	-25/-21				1	3
	-20/-16				2	6
	-15/-11				1	4
	-10/-6				3	22
	-5/-1				5	53
	0/4				10	92
	5/9				24	90
	10/14				17	86
	15/19				8	27
	20/24				2	1
	25/29				1	1
	TOTAL				7	373
1400	-25/-21				1	3
	-20/-16				2	6
	-15/-11				1	4
	-10/-6				3	28
	-5/-1				5	66
	0/4				9	89
	5/9				21	101
	10/14				11	47
	15/19				5	19
	20/24				2	7
	25/29				1	1
	TOTAL				8	373

SEASON: SPRING (MAM)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 12 HR	TOTAL
ABV SFC	INTERVAL	(C)	09 19 29 39 49 59 69 79 89 99	00 10 20 30 40 50 60 70 80 90 100	(%)	OBS
(METERS)						
0	-35/-31				1	1
	-30/-26				1	2
	-25/-21				3	16
	-20/-16				5	14
	-15/-11				4	22
	-10/-6				2	53
	-5/-1				1	153
	0/4				6	189
	5/9				15	111
	10/14				21	42
	15/19				11	5
	TOTAL				10	605
200	-30/-26				1	1
	-25/-21				1	11
	-20/-16				1	13
	-15/-11				2	12
	-10/-6				1	41
	-5/-1				1	105
	0/4				1	173
	5/9				13	153
	10/14				32	66
	15/19				20	28
	20/24				11	1
	25/29				4	605
	TOTAL				8	38
400	-30/-26				1	1
	-25/-21				1	1
	-20/-16				1	10
	-15/-11				1	20
	-10/-6				2	36
	-5/-1				2	103
	0/4				12	155
	5/9				29	155
	10/14				16	80
	15/19				7	31
	20/24				2	6
	25/29				1	605
	TOTAL				2	35
600	-30/-26				1	1
	-25/-21				1	4
	-20/-16				1	10
	-15/-11				1	19
	-10/-6				1	54
	-5/-1				3	112
	0/4				19	154
	5/9				21	152
	10/14				28	65
	15/19				10	29
	20/24				1	2
	25/29				1	605
	TOTAL				3	45
800	-30/-26				1	1
	-25/-21				1	2
	-20/-16				1	7
	-15/-11				3	25
	-10/-6				3	68
	-5/-1				10	120
	0/4				21	167
	5/9				30	122
	10/14				44	63
	15/19				26	19
	20/24				10	3
	25/29				2	605
	TOTAL				8	50
1000	-30/-26				1	2
	-25/-21				1	6
	-20/-16				2	9
	-15/-11				3	32
	-10/-6				3	75
	-5/-1				18	141
	0/4				26	175
	5/9				47	105
	10/14				31	42
	15/19				14	16
	20/24				8	1
	25/29				1	605
	TOTAL				8	56
1200	-30/-26				1	4
	-25/-21				1	6
	-20/-16				1	9
	-15/-11				3	44
	-10/-6				10	88
	-5/-1				18	154
	0/4				36	169
	5/9				37	89
	10/14				20	32
	15/19				12	9
	20/24				5	1
	25/29				1	605
	TOTAL				11	51
1400	-30/-26				1	4
	-25/-21				2	5
	-20/-16				1	14
	-15/-11				3	51
	-10/-6				12	107
	-5/-1				17	178
	0/4				42	148
	5/9				30	68
	10/14				26	26
	15/19				14	3
	20/24				5	605
	25/29				2	1
	TOTAL				16	50

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%) TIME (GMT): 00 HR
 SEASON: SPRING (MAM)

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR
 1 2 3 4 9 8 TOTAL
 39 223 48 548 5 57 920

FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR
 1 2 3 4 9 8 TOTAL
 20 474 53 114 259 920

TABLE VI. - Continued

(c) Summer

PERIOD: JAN 1959-DEC 1968

ELV: 696 M 48 13N 106 37 W

SEASON:	SUMMER (JJA)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	00 HR
ABV SFC (METERS)	INTERVAL (C)	00 09 10 19 20 29 30 39 40 49 50 59 60 69 70 79 80 89 90 99 100	TOTAL DBS			(%)	
0	10/ 14			1	1	3	
	15/ 19		2 7 10 3 10 4 2 1		39		
	20/ 24	5 23 22 18 9 6 2			85		
	25/ 29	14 57 48 18 2			139		
	30/ 34	1 51 57 20 8 1			138		
	35/ 39	3 21 5			29		
	TOTAL	4 91 144 97 54 16 16 7 3 1			433		
200	10/ 14		2 3 5 1 3 2		16		
	15/ 19	3 10 22 10 10 11 2 1			69		
	20/ 24	3 31 42 21 8 2 1			108		
	25/ 29	24 80 34 17 5			160		
	30/ 34	41 29 6			76		
	35/ 39	4			4		
	TOTAL	75 150 106 51 28 14 6 3			433		
400	5/ 9		10 4 11 6 2 1		2		
	10/ 14		1 15 26 16 15 11 4 1		89		
	15/ 19	6 57 44 25 7 2			141		
	20/ 24	24 73 24 12 2 2			117		
	25/ 29	19 7 2			28		
	30/ 34	1 1			2		
	35/ 39	51 153 106 57 35 22 6 3			433		
	TOTAL	5/ 9	1 1 3 1 1		6		
600	10/ 14		4 10 13 10 7 5 2		51		
	15/ 19	16 39 28 21 9 3 1			117		
	20/ 24	5 66 49 24 8 4 1			157		
	25/ 29	21 54 14 5 1			95		
	30/ 34	6 1			7		
	35/ 39	92 141 112 71 41 23 9 4			433		
	TOTAL	5/ 9	2 8 1 5 5 3		21		
800	10/ 14		5 20 18 12 17 6 5		85		
	15/ 19	1 19 42 32 23 7 2			126		
	20/ 24	8 58 49 23 7 4			149		
	25/ 29	14 30 6 1			51		
	30/ 34	1 2			3		
	35/ 39	24 114 119 82 43 33 13 5			433		
	TOTAL	5/ 9	1 3 5 9 10 6 1		2		
1000	10/ 14		5 19 31 17 19 2 4		97		
	15/ 19	2 28 52 35 30 6 1 1			155		
	20/ 24	10 47 44 18 5 1			125		
	25/ 29	9 7 1 1			18		
	30/ 34	1			1		
	35/ 39	21 89 119 90 61 36 11 6			433		
	TOTAL	5/ 9	1 8 15 13 13 10 2		62		
1200	10/ 14		4 21 38 35 19 4 4		125		
	15/ 19	5 34 61 34 14 5 2			155		
	20/ 24	9 36 26 9 2			82		
	25/ 29	3			3		
	30/ 34	14 78 116 96 64 39 20 6			433		
	35/ 39	4 5 2 6 1			18		
	TOTAL	5/ 9	2 10 22 10 24 10 3 1		82		
1400	10/ 14		9 24 39 40 18 6 2		138		
	15/ 19	8 26 64 36 16 4			154		
	20/ 24	3 25 8 3			39		
	25/ 29	1 1			2		
	30/ 34	11 63 107 104 71 48 22 6 1			433		
	TOTAL						
ALTITUDE	AIR TEMP	00 10 20 30 40 50 60 70 80 90 100	TOTAL				
ABV SFC (METERS)	INTERVAL (C)	RELATIVE HUMIDITY TIME (GMT):	DBS				
SEASON:	SUMMER (JJA)						

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SUMMER (JJA) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR
 1 2 3 4 9 8 TOTAL
 17 443 25 15 2 418 920

SEASON: SUMMER (JJA)	ALTITUDE	AIR TEMP	RELATIVE	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND
----------------------	----------	----------	----------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SUMMER (JJA) TIME (GMT): 12 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR
 1 2 3 4 9 8 TOTAL
 29 189 18 626 3 55 920

TABLE VI. - Concluded

(d) Fall

PERIOD: JAN 1959-DEC 1968

ELV: 696 M 48 13N, 106 37 W

SEASON: FALL (SDN)																	SEASON: FALL (SDN)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	00	10	20	30	40	50	60	70	80	90	100	TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	00	10	20	30	40	50	60	70	80	90	100	OBS	(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	OBS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
0	-20/-16								3		1	3											7	0	-30/-26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

(a) Winter

29

TABLE VII.- Continued

(b) Spring

PERIOD: JAN 1959-DEC 1968

ELV: 210 M 44 29N/ 88 08 W

SEASON: SPRING (HAM)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 00 HR	TOTAL	SEASON: SPRING (HAM)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 12 HR	TOTAL
ABV SFC	INTERVAL	(C)	09 19 29 39 49 59 69 79 89 99	00 10 20 30 40 50 60 70 80 90 100	085		ABV SFC	INTERVAL	(C)	09 19 29 39 49 59 69 79 89 99	00 10 20 30 40 50 60 70 80 90 100	085	
(METERS)							(METERS)						
0	-20/-16			2		2	0	-25/-21				1	1
	-15/-11			2		2		-20/-16				1	1
	-10/-6			2		2		-15/-11				1	1
	-5/-1			2		2		-10/-6				1	1
	0/4	1		1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
200	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
400	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
600	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
800	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
1000	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
1200	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1
1400	-25/-21			1	12	12		TOTAL				1	1
	-20/-16			1	12	12		-25/-21				1	1
	-15/-11			1	12	12		-20/-16				1	1
	-10/-6			1	12	12		-15/-11				1	1
	-5/-1			1	12	12		-10/-6				1	1
	0/4			1	12	12		-5/-1				1	1
	5/9			1	12	12		0/4				1	1
	10/14			1	12	12		5/9				1	1
	15/19			1	12	12		10/14				1	1
	20/24			1	12	12		15/19				1	1
	25/29			1	12	12		20/24				1	1
	TOTAL			1	12	12		25/29				1	1

FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

TABLE VII. - Continued

(c) Summer

PERIOD: JAN 1959-DEC 1968

ELV: 210 M 44 29N, 88 08 W

SEASON: SUMMER (JJA)		TIME (GMT): 00 HR											TOTAL OBS
ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL (C)	00	10	20	30	40	50	60	70	80	90	100	
		09	19	29	39	49	59	69	79	89	99		
0	10/ 14				1	18	2	3	1	6			12
	15/ 19				23	57	69	46	53	25	7	1	89
	20/ 24				25	48	68	54	35	3			280
	25/ 29				2	8	22	3					233
	30/ 34				51	131	185	119	102	52	8	1	35
	TOTAL												649
200	10/ 14				14	34	43	24	24	18	6		127
	15/ 19				1	27	73	81	54	45	17	5	163
	20/ 24				12	27	43	45	19				303
	25/ 29				1	3	4	2					146
	30/ 34				1	54	138	177	134	92	41	12	10
	TOTAL												649
400	5/ 9				3	17	19	12	10	8	4		5
	10/ 14				2	15	56	62	43	29	19	8	73
	15/ 19				4	17	54	74	59	41	17	2	234
	20/ 24				6	16	14	26	5				268
	25/ 29												67
	30/ 34				6	41	144	171	140	86	46	15	2
	TOTAL												649
600	5/ 9				2	11	21	39	16	10	9	5	13
	10/ 14				2	12	50	62	43	29	19	8	213
	15/ 19				1	11	33	59	65	32	9	1	285
	20/ 24				4	5	4	11	3				211
	25/ 29				5	38	110	193	152	85	48	18	27
	TOTAL												649
800	5/ 9				1	2	8	6	1	3	2	1	24
	10/ 14				3	10	29	51	41	22	14	8	1
	15/ 19				4	10	37	75	80	48	30	11	179
	20/ 24				2	7	18	28	64	22	3		295
	25/ 29				1	1	2	2	2				144
	TOTAL												7
1000	0/ 4				11	27	88	164	193	93	50	21	2
	5/ 9				2								649
	10/ 14				5	14	28	64	63	37	14	8	1
	15/ 19				2	3	9	29	70	88	45	29	50
	20/ 24				1	4	11	15	32	14	2		281
	25/ 29				1								79
	TOTAL												649
1200	0/ 4				4	10	27	78	163	102	49	18	2
	5/ 9				3	3	8	9	16	19	18	2	8
	10/ 14				2	6	16	21	58	80	60	20	1
	15/ 19				3	5	10	30	50	67	53	21	83
	20/ 24				4	5	4	9	12	3	3		275
	25/ 29				8	18	39	64	134	181	134	47	23
	TOTAL												649
1400	0/ 4				1	2	4	5	1	3			1
	5/ 9				6	6	11	15	22	42	24	7	16
	10/ 14				7	9	9	21	50	83	73	24	138
	15/ 19				6	4	11	23	38	51	31	16	1
	20/ 24				2	3	2	3	6	6	1		291
	TOTAL												181
					21	22	33	63	118	186	134	48	22
													23
													649

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
(METERS) (C) R E L A T I V E H U M I D I T Y (%)

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR
1 2 3 4 9 B TOTAL
29 227 14 128 1 521 920

SEASON: SUMMER (JJA)		TIME (GMT): 12 HR											TOTAL OBS
ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL (C)	00	10	20	30	40	50	60	70	80	90	100	
		09	19	29	39	49	59	69	79	89	99		
0	0/ 4												9
	5/ 9												101
	10/ 14												285
	15/ 19												321
	20/ 24												88
	25/ 29												1
	TOTAL												805
200	5/ 9												52
	10/ 14												238
	15/ 19												367
	20/ 24												143
	25/ 29												5
	TOTAL												805
400	0/ 4												1
	5/ 9												43
	10/ 14												188
	15/ 19												353
	20/ 24												205
	25/ 29												15
	TOTAL												805
600	0/ 4												5
	5/ 9												57
	10/ 14												228
	15/ 19												361
	20/ 24												152
	25/ 29												5
	TOTAL												805
800	0/ 4												5
	5/ 9												81
	10/ 14												271
	15/ 19												340
	20/ 24												104
	25/ 29												4
	TOTAL												805
1000	0/ 4												16
	5/ 9												115
	10/ 14												322
	15/ 19												288
	20/ 24												62
	25/ 29												2
	TOTAL												805
1200	0/ 4												1
	5/ 9												22
	10/ 14												164
	15/ 19												341
	20/ 24												242
	25/ 29												35
	TOTAL												805
1400	0/ 4												2
	5/ 9												38
	10/ 14												218
	15/ 19												362
	20/ 24												167
	25/ 29												18
	TOTAL												805

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
(METERS) (C) R E L A T I V E H U M I D I T Y (%)

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR
1 2 3 4 9 B TOTAL
52 46 12 723 5 82 920

TABLE VII. - Concluded

(d) Fall

PERIOD: JAN 1959-DEC 1968

ELV: 210 M 44 29N 88 08 W

SEASON: FALL (SDN)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 00 HR	TOTAL
ABV SFC INTERVAL	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100
(METERS)	(C)	(C)	(%)	(%)	(%)	(%)
0	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
200	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
400	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
600	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
800	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
1000	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
1200	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
1400	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%) TIME (GMT): 00 HR
 SEASON: FALL (SDN)

FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR
 1 2 3 4 9 8 TOTAL
 54 194 34 347 7 274 910

SEASON: FALL (SDN)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 12 HR	TOTAL
ABV SFC INTERVAL	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100
(METERS)	(C)	(C)	(%)	(%)	(%)	(%)
0	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
200	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
400	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
600	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
800	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
1000	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
1200	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1
1400	-15/-11				1	1
	-10/-6				1	1
	-5/-1				1	1
	0/4				1	1
	5/9				1	1
	10/14				1	1
	15/19				1	1
	20/24				1	1
	25/29				1	1
	30/34				1	1
	TOTAL				1	1

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%) TIME (GMT): 12 HR
 SEASON: FALL (SDN)

FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR
 1 2 3 4 9 8 TOTAL
 54 110 37 596 7 106 910

TABLE VIII. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR COLUMBIA, MISSOURI

(a) Winter

PERIOD: JAN 1959-DEC 1968

SEASON: WINTER (DJF)	ALTITUDE (METERS)	AIR TEMP (C)	RELATIVE HUMIDITY (%)	TIME (GMT): 00 HR	TOTAL OBS
0	0	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100
-20/-16	0	1	3	1	5
-15/-11	0	4	6	7	19
-10/-6	0	5	11	16	60
-5/-1	0	7	15	26	112
0/4	0	4	10	14	147
5/9	0	3	16	19	111
10/14	0	2	13	10	55
15/19	0	2	4	4	21
20/24	0	1	3	1	5
TOTAL	0	11	57	80	545
-20/-16	200	1	4	1	6
-15/-11	200	1	5	7	21
-10/-6	200	2	10	23	75
-5/-1	200	2	8	17	125
0/4	200	5	11	19	128
5/9	200	2	17	26	112
10/14	200	3	12	8	58
15/19	200	2	2	4	16
20/24	200	1	4	3	6
TOTAL	200	14	59	92	545
-20/-16	400	6	4	8	10
-15/-11	400	5	4	8	32
-10/-6	400	7	14	28	90
-5/-1	400	3	14	14	129
0/4	400	2	12	24	104
5/9	400	1	10	15	107
10/14	400	7	11	9	56
15/19	400	1	1	2	15
20/24	400	2	2	2	6
TOTAL	400	2	23	66	545
-20/-16	600	1	1	1	3
-15/-11	600	1	1	1	13
-10/-6	600	2	12	21	39
-5/-1	600	1	19	26	91
0/4	600	3	17	29	127
5/9	600	3	14	23	109
10/14	600	1	6	11	104
15/19	600	1	4	4	31
20/24	600	1	1	1	12
TOTAL	600	7	21	84	545
-20/-16	800	3	3	1	1
-15/-11	800	9	8	12	12
-10/-6	800	10	16	9	90
-5/-1	800	1	14	29	89
0/4	800	2	13	21	130
5/9	800	7	13	19	108
10/14	800	3	4	9	102
15/19	800	1	2	1	48
20/24	800	1	1	1	8
TOTAL	800	13	60	101	545
-20/-16	1000	2	4	10	13
-15/-11	1000	7	11	8	31
-10/-6	1000	7	18	27	94
-5/-1	1000	7	19	23	125
0/4	1000	7	22	11	119
5/9	1000	2	7	5	102
10/14	1000	1	1	1	35
15/19	1000	1	1	1	6
20/24	1000	32	82	87	545
-20/-16	1200	1	1	1	1
-15/-11	1200	3	7	11	8
-10/-6	1200	9	15	14	51
-5/-1	1200	9	25	19	98
0/4	1200	12	25	23	131
5/9	1200	8	22	16	122
10/14	1200	2	6	5	101
15/19	1200	2	6	5	27
20/24	1200	43	102	92	545
-20/-16	1400	2	1	3	8
-15/-11	1400	8	5	11	36
-10/-6	1400	17	11	17	92
-5/-1	1400	12	25	18	137
0/4	1400	24	24	30	128
5/9	1400	11	22	15	126
10/14	1400	3	8	5	24
15/19	1400	1	1	2	4
20/24	1400	76	98	99	545

ALTITUDE (METERS) AIR TEMP (C) RELATIVE HUMIDITY (%) TIME (GMT): 00 HR
SEASON: WINTER (DJF)

FREQUENCY OF WEATHER (CODE) FOR WINTER-00 HR
1 2 3 4 5 6 7 8 9 10 11 12
33 268 57 442 103 903

WLVI 148 M 38 58N/ 92 22 W

SEASON: WINTER (DJF)	ALTITUDE (METERS)	AIR TEMP (C)	RELATIVE HUMIDITY (%)	TIME (GMT): 12 HR	TOTAL OBS
0	0	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100
-25/-21	0	1	1	7	10
-20/-16	0	3	5	14	28
-15/-11	0	5	11	29	73
-10/-6	0	7	13	32	108
-5/-1	0	2	7	13	161
0/4	0	1	3	11	115
5/9	0	1	2	7	49
10/14	0	2	1	6	16
15/19	0	1	1	1	1
20/24	0	2	8	41	561
TOTAL	0	2	8	41	561
-25/-21	200	1	6	13	27
-20/-16	200	2	10	13	70
-15/-11	200	5	15	27	106
-10/-6	200	2	5	17	131
-5/-1	200	9	20	24	122
0/4	200	1	8	12	68
5/9	200	2	2	2	28
10/14	200	4	32	79	561
15/19	200	1	1	1	1
20/24	200	3	10	6	22
-25/-21	400	1	5	13	67
-20/-16	400	4	5	13	97
-15/-11	400	1	5	13	128
-10/-6	400	1	9	26	107
-5/-1	400	4	12	19	82
0/4	400	4	4	5	48
5/9	400	1	1	1	4
10/14	400	10	40	67	561
15/19	400	2	2	4	6
20/24	400	1	6	9	19
-25/-21	600	2	4	10	60
-20/-16	600	4	10	23	104
-15/-11	600	5	17	17	127
-10/-6	600	5	18	25	103
-5/-1	600	1	4	13	7
0/4	600	1	4	7	47
5/9	600	1	1	1	5
10/14	600	3	24	72	561
15/19	600	1	1	1	4
20/24	600	3	1	3	16
-25/-21	800	1	6	11	58
-20/-16	800	1	13	14	112
-15/-11	800	3	13	20	118
-10/-6	800	1	12	17	106
-5/-1	800	5	12	19	100
0/4	800	1	8	5	41
5/9	800	3	3	2	4
10/14	800	12	68	93	561
15/19	800	1	1	1	4
20/24	800	1	4	4	13
-25/-21	1000	5	7	8	56
-20/-16	1000	7	17	13	119
-15/-11	1000	10	17	14	122
-10/-6	1000	4	18	27	111
-5/-1	1000	9	16	13	98
0/4	1000	1	8	7	36
5/9	1000	1	1	2	6
10/14	1000	38	84	92	561
15/19	1000	1	1	1	9
20/24	1000	6	7	4	62
-25/-21	1200	8	22	16	106
-20/-16	1200	12	15	34	140
-15/-11	1200	8	16	27	113
-10/-6	1200	9	16	14	99
-5/-1	1200	2	5	11	28
0/4	1200	2	5	11	4
5/9	1200	48	82	112	561
10/14	1200	2	1	2	9
15/19	1200	9	8	9	67
20/24	1200	19	12	17	106
-25/-21	1400	14	16	38	138
-20/-16	1400	13	18	28	127
-15/-11	1400	12	18	16	83
-10/-6	1400	1	9	8	24
-5/-1	1400	1	1	2	4
0/4	1400	71	83	122	561

ALTITUDE (METERS) AIR TEMP (C) RELATIVE HUMIDITY (%) TIME (GMT): 12 HR
SEASON: WINTER (DJF)

FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR
1 2 3 4 5 6 7 8 9 10 11 12
63 217 61 543 1 18 903

(b) Spring

ELV: 138 M 38 58N, 92 22 W

ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL	SEASON: SPRING (MAM)	TIME (GMT): 12 HR
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99		OBS		
(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)													
SEASON: SPRING (MAM)		TIME (GMT): 00 HR												FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR	

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR

(c) Summer

ELV: 138 M 38 58N, 92 22 W

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR						
1	2	3	4	9	8	TOTAL
23	182	4	100	2	609	920

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR

TABLE VIII. - Concluded

(d) Fall

PERIOD: JAN 1959-DEC 1968

ELV: 138 M 38 58N, 92 22 W

SEASON: FALL (SON)	ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL	00 HR
ABV SFC	INTERVAL	(C)	09	19	29	39	49	59	69	79	89	99		(%)	OBS
(METERS)			09	19	29	39	49	59	69	79	89	99			
0	-10/-6				1		1							2	
	-5/-1						3	1		1				5	
	0/4				1	5	9	8	7	2	1			33	
	5/9			1	8	20	9	11	3	5	3			60	
	10/14				1	24	29	20	13	10	2	7		106	
	15/19		1	14	36	21	27	10	12	12	7		1	141	
	20/24			16	24	32	25	14	11	10				137	
	25/29		1	18	37	28	21	18	4	2				129	
	30/34		2	7	9	7	13	1						39	
	35/39			6	5									11	
	TOTAL		4	63	145	142	128	76	48	33	23	1		663	
200	-10/-6				1		1							7	
	-5/-1						4			2	1			7	
	0/4					6	8	9	11	7	3	1		45	
	5/9			1	9	17	9	12	2	2	3			55	
	10/14			3	33	30	22	11	6	7	7			119	
	15/19		1	14	33	26	27	16	12	9	6			144	
	20/24		1	15	27	35	29	18	20	6	4			155	
	25/29		1	13	30	21	22	19	3					109	
	30/34		1	1	13	7	2							24	
	35/39			2										2	
	TOTAL		4	49	152	144	125	87	53	28	21			663	
400	-10/-6						3	1	1					6	
	-5/-1						4	2	1	5	1			13	
	0/4			1	5	8	9	9	9	2	1			44	
	5/9			3	16	19	14	8	1	2	7			70	
	10/14		1	8	33	35	19	16	8	8	5			133	
	15/19		1	9	32	31	29	17	10	8	7			144	
	20/24		1	12	34	36	21	27	18	7	1			157	
	25/29		1	8	16	20	16	16	4					81	
	30/34			9	5									15	
	TOTAL		4	41	146	158	114	95	56	28	21			663	
600	-15/-11						1		1	1				1	
	-10/-6					1		2	1					5	
	-5/-1				2	4	2	6	4	2				20	
	0/4			2	10	12	6	5	7	4	2			48	
	5/9			4	21	23	17	10	3	4	6			88	
	10/14			11	29	37	23	19	10	9	7			145	
	15/19		1	10	30	31	25	28	11	12	5			152	
	20/24		1	10	24	37	24	26	20	6				148	
	25/29		1	5	4	11	15	9	2					47	
	30/34			5										9	
	TOTAL		2	42	126	159	115	104	58	37	20			663	
800	-15/-11						1		1					1	
	-10/-6					1		3	1	1				7	
	-5/-1			1	7	2	5	4	8	3	3			33	
	0/4		1	6	10	9	11	5	3	1	2			48	
	5/9		3	7	18	26	15	16	4	7	8			104	
	10/14			13	26	36	31	17	16	11	7			157	
	15/19			11	27	28	28	29	22	11	5			161	
	20/24			10	12	23	25	32	19	5				126	
	25/29		1	2	4	8	9	1						25	
	30/34													1	
	TOTAL		5	51	105	133	125	107	73	39	25			663	
1000	-15/-11						1	1	1					4	
	-10/-6					1	1	1	1	2	1			8	
	-5/-1		1	1	7	4	3	5	3	4		2		30	
	0/4		4	8	7	12	8	13	2	2	2			58	
	5/9		3	18	20	36	20	13	9	9	8	2		138	
	10/14		1	14	24	32	25	26	17	15	5			159	
	15/19			8	20	30	25	30	23	16	4			156	
	20/24		2	10	7	12	23	17	3					97	
	25/29					8	4	1						13	
	TOTAL		11	60	85	136	110	113	72	52	20	4		663	
1200	-15/-11					1		1		1				4	
	-10/-6				1	2	1	1	3	2	1	1		11	
	-5/-1		2	5	7	4	3	3	4	1	1			30	
	0/4		6	14	8	13	11	7	7	2	2	1		71	
	5/9		5	21	34	19	20	15	13	12	8	2		149	
	10/14		3	23	24	29	22	26	27	18	6			178	
	15/19			10	16	22	30	34	32	13	3			160	
	20/24		2	7	3	7	10	19	6	1				95	
	25/29					2	3							5	
	TOTAL		18	81	95	97	99	106	88	53	21	5		663	
1400	-15/-11						1		1	2				4	
	-10/-6				2	1		2		4	3	2		14	
	-5/-1		7	6	2	3	6	3	1	4	1	1		34	
	0/4		11	13	7	10	14	5	8	2	2	1		73	
	5/9		20	23	27	26	16	17	16	19	7	2		173	
	10/14		15	19	17	26	32	32	24	19	10			194	
	15/19		4	14	9	10	21	34	32	15	3			142	
	20/24		1	4	3	4	8	9						29	
	TOTAL		60	80	65	81	97	101	86	64	25	4		663	

ALTITUDE ABV SFC (METERS) AIR TEMP INTERVAL (C) 00 10 20 30 40 50 60 70 80 90 100 TOTAL OBS
SEASON: FALL (SON) R E L A T I V E H U M I D I T Y (%) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR TOTAL
1 2 3 4 9 8

33 185 27 284 2 379 910

SEASON: FALL (SON)	ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL	00 HR			
ABV SFC	INTERVAL	(C)	09	19	29	39	49	59	69	79	89	99		(%)	OBS			
(METERS)			09	19	29	39	49	59	69	79	89	99						
0	-15/-11						1	1			1			3				
	-10/-6						1	1	4	2	3			11				
	-5/-1						4	4	15	15	12	1		51				
	0/4						2	5	12	24	36	29	2	110				
	5/9						3	10	20	29	41	42	3	148				
	10/14						1	6	7	24	24	31	5	175				
	15/19						2	7	10	25	36	62	4	146				
	20/24								2	10	27	26	1	67				
	TOTAL		1	1	13	35	74	131	209	229	18			711				
200	-20/-16						1							1				
	-15/-11						1	1	3	4	2			11				
	-10/-6						1	1	6	15	14	1		39				
	-5/-1						1	2	6	15	14	1		91				
	0/4						2	6	15	22	24	17	5	130				
	5/9						1	7	21	32	30	26	13	180				
	10/14						5	8	26	29	52	31	29	172				
	15/19						1	8	17	28	37	49	32	84				
	20/24						1	2	3	7	21	40	10	711				
	25/29						1							2				
	TOTAL		11	33	86	124	183	179	90					711				
400	-20/-16						1							1				
	-15/-11						1	2	2	2	1			10				
	-10/-6						1	1	5	6	14	4	2	33				
	-5/-1						2	3	15	5	11	14	9	64				
	0/4						2	9	27	32	20	17	14	129				
	5/9						6	15	22	27	26	24	19	180				
	10/14						1	13	24	31	30	36	25	115				
	15/19						8	10	16	15	29	34	3	14				
	20/24						2			7	5			7				
	25/29						13	50	101	126	116	136	106	60	3	711		
	TOTAL						1							0				
600	-20/-16						1							1				
	-15/-11						1	2	1	3	3	1	2	13				
	-10/-6						1	4	4	10	8	2		30				
	-5/-1						4	9	10	14				72				
	0/4						1	6	24	22	21	21	5	6	2	117		
	5/9						1	10	20	31	30	29	16	17	20	2	176	
	10/14						1	3	21	25	34	27	36	23	16	186		
	15/19						3	7	6	15	24	32	15	2	104			
	20/24								6	2					11			
	25/29						3								11			
	TOTAL		3	30	84	100	127	127	116	71	48	9		711				
800	-20/-16						1							1				
	-15/-11						1	2	3	1	1	1		14				
	-10/-6						1	2	3	2	3	1	1	1		37		
	-5/-1						2	4	8	6	8	4		1		79		
	0/4						1	8	15	17	12	8	5	3	2	110		
	5/9						2	12	25	21	15	6	4	8	2	194		
	10/14						3	17	22	28	40	18	25	15	8	85		
	15/19						2	9	21	29	21	27	33	27	16	5		
	20/24						9	3	6	16	18	23	10			5		
	25/29															1		
	TOTAL		8	58	86	106	124	106	97	76	43	7		711				
1000	-20/-16						1							1				
	-15/-11						1	2	2	4	3	2	1	1		16		
	-10/-6						1	2	4	3	2	1	1	1		37		
	-5/-1						4	9	11	17	18	14		3		134		
	0/4						4	15	25	19	12	10	8			195		
	5/9						5	24	28	37	28	22	26	14	2	181		
	10/14						2	12	15	29	15	37	30	31	10	59		
	15/19						6	5	3	10	15	16	4			11		
	20/24						19	68	92	116	96	110	92	75	37	5	711	
	25/29															1		
	TOTAL						1							1		4		
1200	-20/-16						1							1				
	-15/-11						1	2	2	1	2			1		44		
	-10/-6						2	6	14	4	5	7	1	2	2	1	79	
	-5/-1						5	14	13	15	11	10	3	2	2	4	163	
	0/4						8	30	27	24	18	14	16	16	8		211	
	5/9						5	24	42	24	26	14	35	24	17		166	
	10/14						1	14	18	18	13	30	39	26	7		29	
	15/19						21	98	116	89	86	5	100	72	37	7	711	
	20/24																1	
	25/29																1	
	TOTAL						1							1		6		
1400	-20/-16						1							1		15		
	-15/-11						1	3	1	3	1	2		4		46		
	-10/-6						7	10	7	5	4	9	2	4	1	4	97	
	-5/-1						2	6	14	4	5	7	1	2	1	4	176	
	0/4						5	14	13	15	11	10	3	2	2	4	137	
	5/9						8	30	27	24	18	14	16	16	8		211	
	10/14						5	24	42	24	26	14	35	24	17		166	
	15/19						1	14	18	18	13	30	39	26	7		29	
	20/24						21	98	116	89	86	5	100	72	37	7	711	
	25/29																1	
	TOTAL						1							1		6		
1600	-20/-16						1							1		15		
	-15/-11						1	3	1	3	1	2		4		46		
	-10/-6						7	10	7	5	4	9	2	4	1	4	176	
	-5/-1						2	6	14	4	5	7	1	2	1	4	137	
	0/4						5	14	13	15	11	10	3	2	2	4	211	
	5/9						8	30	27	24	18	14	16	16	8		166	
	10/14						5	24	42	24	26	14	35	24	17		29	
	15/19						1	14	18	18	13	30	39	26	7		711	
	20/24						21	98	116	89	86	5	100	72	37	7	711	
	25/29																1	
	TOTAL						1							1		6		
1800	-20/-16						1							1		15		
	-15/-11						1	3	1	3	1	2		4		46		
	-10/-6						7	10	7	5	4	9	2	4	1	4	176	
	-5/-1						2	6	14	4	5	7	1	2	1	4	137	
	0/4						5	14	13	15	11	10	3	2	2	4	211	
	5/9						8	30	27	24	18	14	16	16	8		166	
	10/14						5	24	42	24	26	14	35	24	17		29	
	15/19						1	14	18	18	13	30	39	26	7		711	
	20/24						21	98	116	89	86	5	100	72	37	7	711	
	25/29																1	
	TOTAL						1							1		6		
2000	-20/-16						1							1		15		
	-15/-11						1	3	1	3	1	2		4		46		
	-10/-6						7	10	7	5	4	9	2	4	1	4	176	
	-5/-1						2	6	14	4	5	7	1	2	1	4	137	
	0/4						5	14	13	15	11	10	3	2	2	4	211	
	5/9						8	30	27	24	18	14	16	16	8		166	
	10/14						5	24	42	24	26	14	35	24	17		29	
	15/19						1	14	18	18	13	30	39	26	7		711	
	20/24						21	98	116	89	86	5	100	72	37	7	711	
	25/29																1	
	TOTAL						1							1		6		
2200	-20/-16						1							1		15		
	-15/-11						1	3	1	3	1	2		4		46		
	-1																	

TABLE IX. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR SAN ANTONIO, TEXAS

(a) Winter

PERIOD: JAN 1956-DEC 1965

ELV: 243 M 29 32N, 98 28 W

SEASON: WINTER (DJF)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	00 HR
ABV SFC	INTERVAL	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100
(METERS)	(C)	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100
0	-5/-1	1	3	2	1	3
0/4	0/4	1	8	11	18	5
5/9	5/9	1	16	41	35	30
10/14	10/14	3	29	48	23	18
15/19	15/19	2	13	17	19	23
20/24	20/24	2	6	6	1	4
25/29	25/29	1				
30/34	30/34	10	75	125	97	83
TOTAL	TOTAL	10	75	125	97	83
200	-5/-1	2	1	1	1	1
0/4	0/4	1	2	1	3	4
5/9	5/9	1	14	16	21	11
10/14	10/14	3	22	40	37	19
15/19	15/19	5	37	32	22	27
20/24	20/24	4	8	14	12	8
25/29	25/29	2	5	2	1	1
TOTAL	TOTAL	18	89	106	96	70
400	-5/-1	2	1	1	1	1
0/4	0/4	3	5	11	9	2
5/9	5/9	7	10	27	22	10
10/14	10/14	7	30	33	30	18
15/19	15/19	9	36	28	15	19
20/24	20/24	4	8	11	6	3
25/29	25/29	25	93	102	83	56
TOTAL	TOTAL	25	93	102	83	56
600	-5/-1	1	1	1	1	1
0/4	0/4	3	2	5	14	5
5/9	5/9	2	15	29	26	16
10/14	10/14	10	40	35	29	12
15/19	15/19	8	22	25	15	15
20/24	20/24	3	4	5	4	3
25/29	25/29	28	89	100	88	54
TOTAL	TOTAL	28	89	100	88	54
800	-5/-1	2	1	1	1	1
0/4	0/4	1	7	8	16	10
5/9	5/9	7	16	41	24	19
10/14	10/14	13	35	34	14	25
15/19	15/19	8	17	16	14	9
20/24	20/24	2	6	3	4	1
TOTAL	TOTAL	33	87	102	74	66
1000	-5/-1	2	1	1	1	1
0/4	0/4	2	12	12	16	9
5/9	5/9	9	16	42	27	26
10/14	10/14	18	35	37	26	15
15/19	15/19	8	15	14	17	14
20/24	20/24	2	5	3	3	1
TOTAL	TOTAL	41	87	110	94	68
1200	-5/-1	1	1	1	1	1
0/4	0/4	1	1	1	6	5
5/9	5/9	3	14	24	13	11
10/14	10/14	30	32	33	21	19
15/19	15/19	13	18	13	6	10
20/24	20/24	3	6	1	1	1
TOTAL	TOTAL	68	102	114	67	68
1400	-5/-1	1	1	1	1	1
0/4	0/4	6	14	30	20	4
5/9	5/9	30	38	43	19	16
10/14	10/14	41	33	24	24	23
15/19	15/19	16	14	6	6	8
20/24	20/24	2	1	1	1	1
TOTAL	TOTAL	97	102	106	75	56

SEASON: WINTER (DJF)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT):	00 HR
ABV SFC	INTERVAL	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100
(METERS)	(C)	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100	00 09 10 19 20 29 30 40 50 60 70 80 90 100
0	-15/-11	1	1	1	2	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	1	1	12	16	20
15/19	15/19	2	3	10	8	9
20/24	20/24	3	8	23	55	93
TOTAL	TOTAL	3	8	23	55	93
200	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83
400	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83
600	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83
800	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83
1000	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83
1200	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83
1400	-15/-11	1	1	1	1	1
0/4	0/4	1	1	4	4	6
5/9	5/9	1	1	4	4	6
10/14	10/14	2	14	22	42	32
15/19	15/19	1	4	5	2	3
20/24	20/24	9	39	77	97	83
TOTAL	TOTAL	9	39	77	97	83

FREQUENCY OF WEATHER (CODE) FOR WINTER-00 HR
1 2 3 4 9 B TOTAL
54 203 21 409 2 214 903

FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR
1 2 3 4 9 B TOTAL
92 128 40 590 5 48 903

(b) Spring

ELV: 243 M 29 32N, 98 28 W

[illegible]

(c) Summer

ELV: 243 M 29 32N, 98 28 W

[illegible]

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR						
1	2	3	4	9	8	TOTAL
11	66	5	529	6	303	920

(d) Fall

40

(a) Winter

ELV:1611 M 39 46N, 104 53 W

FREQUENCY OF WEATHER (CODE) FOR WINTER-00 HR						
1	2	3	4	9	8	TOTAL
43	183	23	424	2	228	903

(b) Spring

ELV:1611 M 39 46N, 104 53 W

[illegible]

FREQUENCY OF WEATHER (CODE) FOR SPRING-00				HR		
1	2	3	4	9	8	TOTAL
52	364	39	70	3	392	920

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR						
1	2	3	4	9	8	TOTAL
54	104	22	681	5	54	920

(c) Summer

ELV:1611 M 39 46N, 104 53 W

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR						
1	2	3	4	9	8	TOTAL
45	288	61	46		480	920

TABLE X.- Concluded

(d) Fall

PERIOD: JAN 1959-DEC 1968

ELV:1611 M 39 46N, 104 53 W

SEASON: FALL (SDN)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 00 HR	SEASON: FALL (SDN)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 12 HR
ABV SFC (METERS)	INTERVAL (C)	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	TOTAL DBS	ABV SFC (METERS)	INTERVAL (C)	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	TOTAL DBS	TOTAL DBS
0	-15/-11				1	0	-20/-16				1
	-10/-6				3		-15/-11				1
	-5/-1				27		-10/-6				1
	0/4				39		-5/-1				1
	5/9				68		0/4				1
	10/14				115		5/9				1
	15/19				130		10/14				1
	20/24				137		15/19				1
	25/29				103		TOTAL				8
	30/34				19						5
	35/39				3						18
	TOTAL				645						70
200	-20/-16				1		-15/-11				1
	-15/-11				1		-10/-6				1
	-10/-6				7		-5/-1				1
	-5/-1				28		0/4				1
	0/4				46		5/9				1
	5/9				70		10/14				1
	10/14				136		15/19				1
	15/19				145		20/24				1
	20/24				140		TOTAL				8
	25/29				66						4
	30/34				5						800
	TOTAL				645						5
400	-20/-16				1		-15/-11				1
	-15/-11				1		-10/-6				1
	-10/-6				15		-5/-1				1
	-5/-1				27		0/4				1
	0/4				54		5/9				1
	5/9				80		10/14				1
	10/14				157		15/19				1
	15/19				155		20/24				1
	20/24				122		TOTAL				8
	25/29				30						1
	30/34				3						1
	TOTAL				645						800
600	-20/-16				1		-15/-11				1
	-15/-11				2		-10/-6				1
	-10/-6				15		-5/-1				1
	-5/-1				38		0/4				1
	0/4				98		5/9				1
	5/9				113		10/14				1
	10/14				166		15/19				1
	15/19				150		20/24				1
	20/24				93		TOTAL				8
	25/29				9						1
	TOTAL				645						800
800	-20/-16				1		-15/-11				1
	-15/-11				4		-10/-6				1
	-10/-6				20		-5/-1				1
	-5/-1				44		0/4				1
	0/4				64		5/9				1
	5/9				135		10/14				1
	10/14				182		15/19				1
	15/19				145		20/24				1
	20/24				65		TOTAL				8
	25/29				5						1
	TOTAL				645						800
1000	-20/-16				1		-15/-11				1
	-15/-11				7		-10/-6				1
	-10/-6				24		-5/-1				1
	-5/-1				49		0/4				1
	0/4				76		5/9				1
	5/9				168		10/14				1
	10/14				177		15/19				1
	15/19				122		20/24				1
	20/24				21		TOTAL				8
	25/29				645						1
	TOTAL				645						800
1200	-20/-16				1		-15/-11				1
	-15/-11				2		-10/-6				1
	-10/-6				7		-5/-1				1
	-5/-1				26		0/4				1
	0/4				57		5/9				1
	5/9				101		10/14				1
	10/14				202		15/19				1
	15/19				160		20/24				1
	20/24				84		TOTAL				8
	25/29				6						1
	TOTAL				645						800
1400	-20/-16				1		-15/-11				1
	-15/-11				10		-10/-6				1
	-10/-6				34		-5/-1				1
	-5/-1				56		0/4				1
	0/4				142		5/9				1
	5/9				207		10/14				1
	10/14				150		15/19				1
	15/19				40		20/24				1
	20/24				4		TOTAL				8
	TOTAL				645						800
ALTITUDE	AIR TEMP	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	TOTAL	ALTITUDE	AIR TEMP	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	TOTAL	TOTAL
ABV SFC (METERS)	INTERVAL (C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	DBS	ABV SFC (METERS)	INTERVAL (C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	DBS	DBS
SEASON: FALL (SDN)	RELATIVE	HUMIDITY	TIME (GMT): 00 HR			SEASON: FALL (SDN)	RELATIVE	HUMIDITY	TIME (GMT): 12 HR		
	0 1 2 3 4	5 6 7 8 9	10 11 12 13	14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100							
	26 213	22 206	4 439	910							

TABLE XI. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR SAN DIEGO, CALIFORNIA

(a) Winter

PERIOD: JAN 1959-DEC 1968

ELV: 124 M 32 49N, 117 08 W

SEASON: WINTER (DJF)		TIME (GMT): 00 HR											TOTAL
ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	00	DBS
(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)											
		09	19	29	39	49	59	69	79	89	99	00	
0	5/ 9			1	1								2
	10/ 14			1	1	19	24	36	33	13	7		134
	15/ 19	1	16	43	67	74	118	107	26	4			456
	20/ 24	5	45	46	36	11	3						147
	25/ 29	3	12	8		2							25
	30/ 34		2										2
	TOTAL	9	76	99	123	111	157	140	39	12			766
200	5/ 9					3	5	3	5				18
	10/ 14	1	9	26	37	51	87	82	26	2	7		326
	15/ 19	11	46	74	65	54	35	11	5	1			302
	20/ 24	14	63	27	7	1							112
	25/ 29	7	1										8
	TOTAL	26	125	131	114	109	127	93	33	8			766
400	0/ 4												1
	5/ 9	1	1	5	12	21	28	26	9	1			104
	10/ 14	14	45	45	36	26	53	67	36	6			328
	15/ 19	37	107	51	19	8	6	2	2				232
	20/ 24	42	48	9	1								100
	25/ 29	1											1
	TOTAL	94	202	111	68	55	87	95	47	7			766
600	0/ 4												8
	5/ 9	1	10	11	17	28	45	55	17	2	1		187
	10/ 14	38	52	44	25	34	33	30	19	1			276
	15/ 19	79	123	28	5	3							239
	20/ 24	30	22	2	1								55
	25/ 29	1											1
	TOTAL	149	207	87	49	68	80	86	36	3	1		766
800	-5/ -1												1
	0/ 4												23
	5/ 9	6	21	22	17	32	32	51	33	7			221
	10/ 14	52	69	44	35	23	17	7	11				258
	15/ 19	106	98	18	5	2							229
	20/ 24	18	14	2									34
	TOTAL	182	203	88	60	60	58	61	47	7			766
1000	-5/ -1												2
	0/ 4	2	1	2	1	13	16	14	10	2			71
	5/ 9	23	33	23	24	27	34	29	18	4			215
	10/ 14	72	75	50	26	16	9	6	6	1			261
	15/ 19	104	79	12	2	1							198
	20/ 24	11	7	1									19
	TOTAL	212	195	88	64	57	59	50	34	7			766
1200	-5/ -1												8
	0/ 4	3	2	14	14	17	16	11	21	3			101
	5/ 9	43	48	41	25	28	19	11	12	5			232
	10/ 14	91	86	54	17	14	10	3	2	1			278
	15/ 19	80	52	10	1								143
	20/ 24	3	1										4
	TOTAL	220	189	119	59	60	46	28	36	9			766
1400	-5/ -1												1
	0/ 4	1	1			2	2	4	3	4			17
	5/ 9	5	10	19	16	19	19	15	18	3			124
	10/ 14	69	68	38	23	16	17	8	9	3	1		252
	15/ 19	124	81	38	25	6	3	2	1	2			282
	20/ 24	49	32	6		1							89
	TOTAL	249	192	101	66	45	43	29	32	8	1		766

ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	00	DBS
(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)											
		09	19	29	39	49	59	69	79	89	99	00	
SEASON: WINTER (DJF)		TIME (GMT): 00 HR											

FREQUENCY OF WEATHER (CODE) FOR WINTER-00 HR
 1 2 3 4 9 8 TOTAL
 21 103 12 443 1 323 903

SEASON: WINTER (DJF)		TIME (GMT): 12 HR											TOTAL
ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	00	DBS
(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)											
		09	19	29	39	49	59	69	79	89	99	00	
0	-5/ -1					2	4	5	10	19	27	20	1
	0/ 4					1	6	19	36	42	78	92	474
	5/ 9					1	10	11	15	18	30	59	269
	10/ 14					1	1	2	1	1	1	1	7
	15/ 19					1	1	2	1	1	1	1	6
	TOTAL					4	19	36	56	71	128	179	838
200	0/ 4					1	6	9	20	35	53	100	280
	5/ 9					2	6	9	24	47	63	49	257
	10/ 14					6	15	30	25	11	6	2	95
	15/ 19					2	1	1					4
	20/ 24					16	46	87	109	97	91	127	838
	TOTAL					16	46	87	109	97	91	127	838
400	0/ 4					1	1	1	1	1			4
	5/ 9					7	8	16	19	23	27	64	274
	10/ 14					22	41	63	34	30	31	35	324
	15/ 19					34	90	51	29	7	2		213
	20/ 24					9	7	6	1				23
	TOTAL					73	146	137	84	61	60	99	838
600	0/ 4					1	2	1	4	5	6	1	20
	5/ 9					9	8	30	17	21	30	72	300
	10/ 14					35	75	38	30	34	24	15	270
	15/ 19					78	82	42	13	3			218
	20/ 24					18	6	6					30
	TOTAL					141	173	117	60	62	59	93	838
800	-5/ -1					1							1
	0/ 4					1	3	3	4	5	9	17	61
	5/ 9					13	33	24	27	20	26	34	275
	10/ 14					48	81	63	33	16	12	10	273
	15/ 19					88	79	30	7	2			206
	20/ 24					15	5	1					21
	TOTAL					165	201	122	71	43	47	61	838
1000	-5/ -1					1							3
	0/ 4					5	6	5	7	12	14	26	8
	5/ 9					23	45	32	27	13	25	31	253
	10/ 14					77	100	56	20	11	5	6	281
	15/ 19					89	57	21	4				171
	20/ 24					9	2						11
	TOTAL					203	210	115	58	37	45	63	838
1200	-5/ -1					1							1
	0/ 4					7	12	5	18	13	18	24	156
	5/ 9					33	68	45	36	19	13	17	258
	10/ 14					107	92	51	14	13	3	2	285
	15/ 19					74	39	8	1				122
	20/ 24					4							4
	TOTAL					226	211	110	71	46	35	48	838
1400	-10/ -6					1							1
	-5/ -1					1	1	3	3	4	2	10	31
	0/ 4					11	20	14	21	12	17	24	173
	5/ 9					54	77	47	33	10	4	12	258
	10/ 14					138	87	43	12	7	4	2	295
	15/ 19					55	18	4	1				78
	20/ 24					2							2
	TOTAL					201	203	111	71	33	32	48	838

ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99		OBS
(METERS)	(C)	R E L A T I V E H U M I D I T Y (%)											
SEASON: WINTER (DJF)		TIME (GMT): 12 HR											

FREQUENCY OF WEATHER (CODE) FOR WINTER-12 HR
 1 2 3 4 9 8 TOTAL
 39 14 10 787 2 51 903

TABLE XI. - Continued

(b) Spring

PERIOD: JAN 1959-DEC 1968

ELV: 124 M 32 49N, 117 08 W

SEASON: SPRING (MAM)		TIME (GMT): 00 HR											TOTAL OBS
ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL (C)	00	10	20	30	40	50	60	70	80	90	100	
R E L A T I V E		09	19	29	39	49	59	69	79	89	99		
0	10/ 14				3	5	14	14	3	4			43
	15/ 19			2	10	20	70	205	109	12	1		429
	20/ 24			11	18	31	52	54	8				174
	25/ 29			1	16	10	6	1					34
	30/ 34			3	1								4
	TOTAL			4	30	38	60	128	273	131	15	5	684
200	5/ 9						2						2
	10/ 14			2	3	10	36	80	67	22	3		223
	15/ 19			9	24	45	73	93	70	8			322
	20/ 24			5	18	37	27	21	3				111
	25/ 29			5	14	5	1						25
	30/ 34												1
	TOTAL			10	44	69	83	132	176	137	30	3	684
400	5/ 9						1	4	9	14	12	3	43
	10/ 14			2	8	14	14	38	84	153	51	8	372
	15/ 19			7	40	36	27	25	9	8			152
	20/ 24			19	44	18	13	2					96
	25/ 29			13	8								21
	TOTAL			41	100	69	58	74	107	173	54	8	684
600	5/ 9						5	16	17	29	62	57	129
	10/ 14			5	14	17	29	62	57	60	23	4	271
	15/ 19			21	59	30	23	29	13				175
	20/ 24			39	30	21	4	1					95
	25/ 29			9	5								14
	TOTAL			74	110	72	65	109	104	101	40	9	684
800	5/ 9						1	3	9	8	22	32	180
	10/ 14						6	34	46	30	28	21	191
	15/ 19						37	72	47	25	5	2	189
	20/ 24						42	37	20	1			100
	25/ 29						8	6	2				16
	TOTAL						94	152	125	65	55	58	684
1000	5/ 9						1	2	5	4	4	12	35
	10/ 14						2	11	13	8	22	33	168
	15/ 19						20	54	40	23	17	16	181
	20/ 24						72	77	33	8	5	1	197
	25/ 29						51	32	9				92
	TOTAL						150	181	97	44	48	54	684
1200	5/ 9						2	2	7	8	7	10	72
	10/ 14						6	18	13	16	16	19	121
	15/ 19						34	90	39	26	20	9	220
	20/ 24						77	76	23	10	2		188
	25/ 29						39	32	7				78
	TOTAL						160	221	89	60	45	38	684
1400	5/ 9						4	8	13	2	10	16	3
	10/ 14						19	33	15	16	11	6	120
	15/ 19						74	77	46	7	12	4	220
	20/ 24						85	74	30	2	1		192
	25/ 29						29	17	2				48
	TOTAL						212	211	106	27	34	27	684

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: SPRING (MAM) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR
 1 2 3 4 9 8 TOTAL
 12 217 6 520 1 164 920

SEASON: SPRING (MAM)		TIME (GMT): 12 HR											TOTAL OBS
ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL (C)	00	10	20	30	40	50	60	70	80	90	100	
R E L A T I V E		09	19	29	39	49	59	69	79	89	99		
0	0/ 4						1	2	5	7	11	63	3
	5/ 9						2	1	5	15	18	83	95
	10/ 14						2	1	5	15	18	83	194
	15/ 19						2	1	5	15	18	83	211
	TOTAL						2	1	5	15	18	83	31
200	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103
400	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	25/ 29						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103
600	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	25/ 29						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103
800	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	25/ 29						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103
1000	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	25/ 29						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103
1200	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	25/ 29						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103
1400	5/ 9						2	1	5	15	18	83	103
	10/ 14						2	1	5	15	18	83	103
	15/ 19						2	1	5	15	18	83	103
	20/ 24						2	1	5	15	18	83	103
	25/ 29						2	1	5	15	18	83	103
	TOTAL						2	1	5	15	18	83	103

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR
 1 2 3 4 9 8 TOTAL
 44 14 10 746 3 103 920

TABLE XI. - Continued

(c) Summer

PERIOD: JAN 1959-DEC 1968

ELV: 124 M 32 49N, 117 08 W

SEASON: SUMMER (JJA)	AIR TEMP	R E L A T I V E	H U M I D I T Y	TIME (GMT):	00 HR
ALTITUDE	INTERVAL	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	(%)	TOTAL
ABV SFC	(C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99		OBS
(METERS)					
0	15/ 19		7 34 37 19		97
	20/ 24		3 46 313 88 7		457
	25/ 29	1 8 32	91 99 3		234
	30/ 34	1 9 10 2			22
	35/ 39	1			1
	TOTAL	3 17 45 146 446	128 26		811
200	10/ 14		6 7 8		21
	15/ 19		1 6 79 91 22 1		200
	20/ 24	19 80 105 147 39			394
	25/ 29	10 66 69 36 5			186
	30/ 34	1 2 6 1			10
	TOTAL	1 12 91 151 147 237 137 34 1			811
400	10/ 14		3 12 50 36 6		108
	15/ 19	1 4 8 24 81 89 27 1			235
	20/ 24	17 44 49 62 67 41 6 2			288
	25/ 29	40 65 35 23 8			171
	30/ 34	5 4			9
	TOTAL	62 114 88 94 102 134 145 65 7			811
600	5/ 9				7
	10/ 14		1 2 7 15 33 14 2		74
	15/ 19	2 8 32 74 45 16 5 1			183
	20/ 24	27 55 67 94 66 19 3			331
	25/ 29	65 72 41 23 3			204
	30/ 34	5 7			12
	TOTAL	97 136 117 151 150 81 55 21 3			811
800	5/ 9				21
	10/ 14		1 1 3 8 3 10 11 1		38
	15/ 19	1 17 19 24 20 10 8 1 1			101
	20/ 24	43 117 89 54 28 9 3			343
	25/ 29	98 120 51 16 4 1			290
	30/ 34	11 7			18
	TOTAL	153 262 160 97 61 25 30 18 5			811
1000	5/ 9				23
	10/ 14	1 2 1 5 6 5 8 3			31
	15/ 19	12 13 24 19 13 3 5 1			90
	20/ 24	118 83 55 42 18 7 1			324
	25/ 29	133 123 50 14 3 1			324
	30/ 34	14 5			19
	TOTAL	278 226 130 81 41 19 24 11 1			811
1200	5/ 9				25
	10/ 14	1 4 5 8 2 3 3 2			28
	15/ 19	19 31 30 12 6 2 1			101
	20/ 24	136 100 69 39 23 6 1			374
	25/ 29	105 115 52 5 1			278
	30/ 34	4 1			5
	TOTAL	265 251 157 65 34 17 12 8 2			811
1400	0/ 4				2
	5/ 9				27
	10/ 14	3 5 9			23
	15/ 19	40 31 23 11 5 2 2			114
	20/ 24	168 114 81 47 25 5 1			441
	25/ 29	81 79 37 4			201
	30/ 34	3			3
	TOTAL	296 229 153 64 36 14 12 6 1			811

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 (%) OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y TIME (GMT): 00 HR
 SEASON: SUMMER (JJA)

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR
 1 2 3 4 9 8 TOTAL
 6 102 789 1 22 920

SEASON: SUMMER (JJA)	AIR TEMP	R E L A T I V E	H U M I D I T Y	TIME (GMT):	00 HR
ALTITUDE	INTERVAL	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	(%)	TOTAL
ABV SFC	(C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99		OBS
(METERS)					
0	5/ 9				2
	10/ 14		12 31 54 3		100
	15/ 19	1 1	25 290 352 22		691
	20/ 24		2 40 39 2		87
	TOTAL	1 1 4 39 361 447 27			880
200	5/ 9				1
	10/ 14		1 12 99 61		173
	15/ 19		9 35 92 236 114		486
	20/ 24	2 27 72 79 31 3			214
	25/ 29	1 2 2			5
	TOTAL	3 38 110 184 366 179			880
400	10/ 14		1 2 20 138 121 6		290
	15/ 19	2 3 7 20 34 52 91 64 2			275
	20/ 24	7 16 35 44 43 57 29 9			240
	25/ 29	3 18 16 17 6 7			67
	30/ 34	2 3			5
	TOTAL	10 38 58 69 70 100 101 239 187 8			880
600	5/ 9				1
	10/ 14		3 25 35 49 17		129
	15/ 19	1 14 16 64 129 77 12 3			316
	20/ 24	14 31 53 70 69 48 16 3			304
	25/ 29	11 28 28 22 9 1			99
	30/ 34	4 2			6
	TOTAL	26 63 97 108 146 203 133 75 28 1			880
800	5/ 9				1
	10/ 14		1 26 11 3		44
	15/ 19	2 2 9 12 8 11 25 11			80
	20/ 24	3 19 30 32 25 14 8 3			134
	25/ 29	38 112 123 90 47 24 8 1			443
	30/ 34	34 65 37 25 6			167
	TOTAL	81 203 194 156 90 46 28 55 22 3			880
1000	0/ 4				1
	5/ 9		1 2 11 22 6 1		43
	10/ 14	1 4 5 9 9 19 17 5 1			70
	15/ 19	13 25 18 26 14 8 3			107
	20/ 24	125 117 78 52 28 13 5			418
	25/ 29	92 77 43 14 4			230
	30/ 34	7 3 1			11
	TOTAL	238 226 146 101 55 42 37 27 7 1			880
1200	0/ 4				6
	5/ 9		1 2 4 6 11 6 1		32
	10/ 14	3 9 14 4 8 2 1 1			42
	15/ 19	26 40 39 30 14 5 2			156
	20/ 24	148 131 86 43 35 8 4			455
	25/ 29	65 72 33 13			183
	30/ 34	5 1			6
	TOTAL	244 248 167 101 56 25 14 16 8 1			880
1400	0/ 4				12
	5/ 9		1 1 6 4		25
	10/ 14	1 1 2 3 1 4 8 4 1			33
	15/ 19	4 8 4 9 4 3			177
	20/ 24	58 49 29 16 16 6 1 2			495
	25/ 29	184 123 99 45 31 10 3			135
	30/ 34	56 52 23 3 1			3
	TOTAL	306 293 155 76 55 21 14 14 5 1			880

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 (%) OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y TIME (GMT): 12 HR
 SEASON: SUMMER (JJA)

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR
 1 2 3 4 9 8 TOTAL
 35 3 1 865 1 15 920

TABLE XI. - Concluded

(d) Fall

PERIOD: JAN 1959-DEC 1968

ELV: 124 M 32 49N 117 08 W

SEASON: FALL (SDN)	ALTITUDE (METERS)	AIR TEMP (C)	RELATIVE HUMIDITY (%)	TIME (GMT): 00 HR	00 10 20 30 40 50 60 70 80 90 100 OBS	SEASON: FALL (SDN)	ALTITUDE (METERS)	AIR TEMP (C)	RELATIVE HUMIDITY (%)	TIME (GMT): 12 HR	00 10 20 30 40 50 60 70 80 90 100 OBS							
0	10/ 14	1	1	1	3	1	2	2	11	0	0/ 4	1	1	1	1	1	1	4
	15/ 19	1	1	1	1	1	1	1	200		5/ 9	1	1	1	1	1	1	77
	20/ 24	1	4	17	14	54	191	104	390		10/ 14	1	1	1	1	1	1	311
	25/ 29	1	4	17	24	16	40	21	126		15/ 19	2	3	5	13	7	7	436
	30/ 34	1	7	9	11	5	1		34		20/ 24	1	1	1	3	4		35
	35/ 39	1	4						4		25/ 29	1	1	1				3
	TOTAL	1	12	35	59	44	117	271	765		TOTAL	3	6	17	34	34	35	866
200	10/ 14	1	1	1	1	1	1	1	38	200	5/ 9	1	1	1	1	1	1	19
	15/ 19	1	5	13	18	35	98	123	318		10/ 14	7	4	12	16	23	42	272
	20/ 24	4	13	31	64	65	55	30	267		15/ 19	2	20	11	24	27	46	451
	25/ 29	14	29	38	30	7			118		20/ 24	2	12	12	11	24	29	113
	30/ 34	6	8	4	3				21		25/ 29	1	5	2	2	1		11
	35/ 39	1	1	1					3		TOTAL	4	40	32	51	72	101	866
	TOTAL	25	56	88	119	113	163	163	765	400	5/ 9	1	1	1	1	1	1	21
400	10/ 14	1	1	1	1	1	1	1	5		10/ 14	2	6	9	10	9	16	330
	15/ 19	3	7	10	12	25	56	26	143		15/ 19	11	22	18	27	33	32	268
	20/ 24	9	15	14	23	31	52	97	285		20/ 24	18	46	34	31	26	5	165
	25/ 29	16	60	48	37	21	9	3	196		25/ 29	17	30	13	10	3	1	74
	30/ 34	50	47	14	9	1	1		122		30/ 34	2	5	1				8
	35/ 39	7	4	1					12		TOTAL	50	110	82	69	68	61	866
	TOTAL	1	1	1					2	600	0/ 4	1	1	1	1	1	1	2
600	10/ 14	83	130	84	80	67	87	157	765		5/ 9	1	1	1	1	1	1	37
	15/ 19	3	7	10	12	25	56	26	14		10/ 14	3	13	11	8	18	30	266
	20/ 24	2	8	11	11	18	28	57	159		15/ 19	20	26	28	30	43	73	278
	25/ 29	10	19	25	44	64	44	34	254		20/ 24	33	49	38	35	17	9	91
	30/ 34	33	69	53	25	13	4	2	199		25/ 29	36	25	20	9	1		8
	35/ 39	62	37	21	8	2			130		TOTAL	95	118	98	84	83	115	866
	TOTAL	1	1	1					8	800	0/ 4	1	1	1	1	1	1	4
800	10/ 14	112	136	111	90	100	79	96	765		5/ 9	1	1	1	1	1	1	84
	15/ 19	3	1	1	1	1	1	1	3		10/ 14	10	13	12	14	18	19	209
	20/ 24	7	11	18	13	13	19	42	29		15/ 19	33	53	64	39	26	14	245
	25/ 29	18	51	37	37	29	15	9	157		20/ 24	52	86	50	29	9	3	232
	30/ 34	53	89	58	27	7	4	1	200		25/ 29	36	30	16	4	1		87
	35/ 39	62	46	11	7	3			129		TOTAL	134	189	145	91	59	44	866
	TOTAL	4	3	1					8	1000	0/ 4	1	1	1	1	1	1	6
1000	10/ 14	144	200	129	84	61	42	59	765		5/ 9	1	1	1	1	1	1	107
	15/ 19	3	7	10	12	25	56	26	6		10/ 14	17	17	18	13	14	25	191
	20/ 24	13	15	13	14	20	24	27	52		15/ 19	61	73	45	25	17	9	239
	25/ 29	42	71	40	24	17	14	4	214		20/ 24	105	88	28	16	7	4	249
	30/ 34	89	88	27	23	8	4		239		25/ 29	37	25	7	2	1		72
	35/ 39	57	34	7	5	3			106		TOTAL	222	208	106	62	47	52	866
	TOTAL	2	2						4	1200	-5/ -1	1	1	1	1	1	1	2
1200	10/ 14	203	213	95	71	54	53	44	765		0/ 4	1	1	1	1	1	1	17
	15/ 19	1	1	1	1	1	1	1	8		5/ 9	5	5	13	10	15	7	111
	20/ 24	19	18	21	24	18	15	13	137		10/ 14	18	26	35	21	16	20	173
	25/ 29	58	78	46	32	15	5	4	238		15/ 19	79	89	56	29	15	4	280
	30/ 34	100	87	35	20	6	5		253		20/ 24	111	71	33	12	6	5	239
	35/ 39	29	20	9	2				60		25/ 29	20	16	7	1			44
	TOTAL	1	1	1					1	1400	-5/ -1	1	1	1	1	1	1	866
1400	10/ 14	207	211	120	87	48	34	31	765		0/ 4	1	1	1	1	1	1	37
	15/ 19	2	1	1	1	1	1	1	2		5/ 9	10	8	16	7	6	12	106
	20/ 24	32	28	21	19	12	12	10	20		10/ 14	48	36	28	21	15	8	181
	25/ 29	85	90	56	22	10	5	3	271		15/ 19	118	98	51	17	9	8	308
	30/ 34	103	57	40	13	9	2		224		20/ 24	105	58	20	14	7	3	208
	35/ 39	15	13	6	1				35		25/ 29	9	8	5	1			23
	TOTAL	242	201	135	60	41	34	29	765		TOTAL	290	210	126	63	42	35	866

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
 (METERS) (C) R E L A T I V E H U M I D I T Y (%)
 SEASON: FALL (SDN) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR
 1 2 3 4 9 8 TOTAL
 29 4 1 822 10 44 910

FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR
 1 2 3 4 9 8 TOTAL
 13 117 5 636 10 129 910

(a) Winter

49

(b) Spring

ELV: 6 M 37 44N, 122 12 W

[illegible]

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR						
1	2	3	4	9	8	TOTAL
50	100	15	612	3	140	920

TABLE XII. - Continued

(c) Summer

PERIOD: JAN 1959-DEC 1968

ELV: 6 M 37 44N, 122 12 W

SEASON: SUMMER (JJA)	ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL (C)	REL 00 09	EL 10 19	ATI 20 29	VE 30 39	HUM 40 49	ID 50 59	IT 60 69	TY 70 79	TIME (GMT): 00 HR (%) TOTAL 80 90 100 OBS
0	10/ 14										5
	15/ 19										101
	20/ 24										96
	25/ 29										27
	30/ 34										2
	35/ 39										1
	TOTAL										232
200	10/ 14										37
	15/ 19										118
	20/ 24										55
	25/ 29										20
	30/ 34										1
	TOTAL										232
400	5/ 9										1
	10/ 14										39
	15/ 19										83
	20/ 24										72
	25/ 29										34
	30/ 34										1
	TOTAL										232
600	5/ 9										5
	10/ 14										34
	15/ 19										53
	20/ 24										77
	25/ 29										56
	30/ 34										7
	TOTAL										232
800	5/ 9										5
	10/ 14										27
	15/ 19										46
	20/ 24										95
	25/ 29										54
	30/ 34										5
	TOTAL										232
1000	5/ 9										8
	10/ 14										21
	15/ 19										39
	20/ 24										100
	25/ 29										61
	30/ 34										3
	TOTAL										232
1200	0/ 4										2
	5/ 9										8
	10/ 14										20
	15/ 19										47
	20/ 24										106
	25/ 29										49
	30/ 34										4
	TOTAL										232
1400	0/ 4										4
	5/ 9										9
	10/ 14										23
	15/ 19										56
	20/ 24										109
	25/ 29										31
	30/ 34										1
	TOTAL										232

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
(METERS) (C) RELATI VE HUMIDITY (%)
SEASON: SUMMER (JJA) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR
1 2 3 4 9 8 TOTAL
2 683 1 219 2 13 920

SEASON: SUMMER (JJA)	ALTITUDE ABV SFC (METERS)	AIR TEMP INTERVAL (C)	REL 00 09	EL 10 19	ATI 20 29	VE 30 39	HUM 40 49	ID 50 59	IT 60 69	TY 70 79	TIME (GMT): 12 HR (%) TOTAL 80 90 100 OBS
0	10/ 14										553
	15/ 19										260
	20/ 24										1
	TOTAL										814
200	5/ 9										5
	10/ 14										2
	15/ 19										553
	20/ 24										218
	25/ 29										37
	TOTAL										814
400	5/ 9										53
	10/ 14										367
	15/ 19										251
	20/ 24										119
	25/ 29										23
	30/ 34										1
	TOTAL										814
600	5/ 9										74
	10/ 14										297
	15/ 19										170
	20/ 24										180
	25/ 29										86
	30/ 34										7
	TOTAL										814
800	5/ 9										37
	10/ 14										156
	15/ 19										263
	20/ 24										236
	25/ 29										117
	30/ 34										5
	TOTAL										814
1000	0/ 4										2
	5/ 9										37
	10/ 14										106
	15/ 19										143
	20/ 24										329
	25/ 29										186
	30/ 34										11
	TOTAL										814
1200	0/ 4										2
	5/ 9										33
	10/ 14										111
	15/ 19										167
	20/ 24										355
	25/ 29										143
	30/ 34										3
	TOTAL										814
1400	0/ 4										3
	5/ 9										34
	10/ 14										116
	15/ 19										213
	20/ 24										352
	25/ 29										96
	30/ 34										1
	TOTAL										814

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 OBS
(METERS) (C) RELATI VE HUMIDITY (%)
SEASON: SUMMER (JJA) TIME (GMT): 12 HR

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR
1 2 3 4 9 8 TOTAL
22 76 7 797 1 17 920

(d) Fall

ELV: 6 M 37 44N, 122 12 W

[illegible]

TABLE XIII. - FREQUENCY DISTRIBUTION OF AIR TEMPERATURE AND RELATIVE HUMIDITY IN THE LOWER ATMOSPHERE BY SEASON AND OBSERVATION TIME FOR TATOOSH ISLAND, WASHINGTON

(a) Winter

PERIOD: JAN 1956-DEC 1965															ELV: 31 M 48 23N 124 44 W																								
SEASON: WINTER (DJF)	ALTITUDE	AIR TEMP	REL	E	A	T	I	V	E	H	U	M	I	D	I	T	Y	TIME (GMT): 00 HR	ABV SFC	SEASON: WINTER (DJF)	ALTITUDE	AIR TEMP	REL	E	A	T	I	V	E	H	U	M	I	D	I	T	Y	TIME (GMT): 12 HR	ABV SFC
(METERS)	(METERS)	(C)	00	10	20	30	40	50	60	70	80	90	100	00	10	20	30	40	50	60	70	80	90	100	00	10	20	30	40	50	60	70	80	90	100	00			
INTERVAL	INTERVAL	INTERVAL	09	19	29	39	49	59	69	79	89	99	00	00	INTERVAL	INTERVAL	INTERVAL	09	19	29	39	49	59	69	79	89	99	00	10	20	30	40	50	60	70	80	90	100	00
(METERS)	(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	00	00	(METERS)	(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	00	10	20	30	40	50	60	70	80	90	100	00
0	-5/-1	1	1	4	3	15	7	3					3		0	-5/-1	2	3	1	11	22	14					1												
	0/4	2	1	1	7	27	51	43	20				34			0/4																							
	5/9	3	2	1	13	31	73	61	29				152			5/9																							
	10/14	3	2	1	13	31	73	61	29				24			10/14																							
200	TOTAL	3	2	1	13	31	73	61	29				213			TOTAL																							
	-10/-6	1											1			-10/-6	1																						
	-5/-1	1											1			-5/-1	1																						
	0/4	1	2	3	6	19	30	10	3				74			0/4	1	2	3	6	19	30	10	3															
	5/9	2	1	1	5	24	40	34	15				122			5/9	1	1	1	5	25	36	16																
	10/14	1											9			10/14	1	2	2	7	11	53	74	24															
400	TOTAL	3	5	5	14	47	74	46	19				213			TOTAL	1	2	2	7	11	53	74	24															
	-10/-6	1											1			-10/-6	1																						
	-5/-1	1											16			-5/-1	1																						
	0/4	1	2	5	9	32	38	18	9				113			0/4	1	1	1	3	14	21	12																
	5/9	1	1	1	3	8	29	25	10				78			5/9	1	1	1	3	6	8	9																
	10/14	1											5			10/14	1	2	2	5	6	13	59	60	27														
600	TOTAL	1	2	4	10	14	46	72	45	19			213			TOTAL	1	3	5	6	13	59	60	27															
	-10/-6	1											2			-10/-6	1																						
	-5/-1	1											37			-5/-1	1																						
	0/4	1	1	1	3	2	12	5	1				129			0/4	1	4	2	11	34	38	20																
	5/9	1	1	1	7	18	45	36	11				40			5/9	2	1	1	3	6	8	9																
	10/14	1											4			10/14	4	1	6	8	16	52	54	33															
800	TOTAL	1	5	2	15	12	37	66	54	20	1		213			TOTAL	4	1	6	8	16	52	54	33															
	-15/-11	1											1			-15/-11	2	1	2	2	11	23	35	20	1														
	-10/-6	1											1			-10/-6	2	1	2	1	1	7	2																
	-5/-1	1	2	4	7	13	14	28	31	14	1		115			-5/-1	4	2	8	8	18	46	58	29	1														
	0/4	1	2	4	7	13	14	28	31	14	1		115			0/4	1	4	11	11	23	27	13	1															
	5/9	1	2	1	2	2	5	6	5	3			24			5/9	2	2	4	4	5	12	21	16	4														
	10/14	3	6	5	12	21	36	54	53	22	1		213			10/14	3	3	3	1	3	3	1																
1000	TOTAL	3	6	5	12	21	36	54	53	22	1		213			TOTAL	3	3	3	1	3	3	1																
	-15/-11	1											1			-15/-11	3	6	9	15	17	36	53	30	3														
	-10/-6	1											10			-10/-6	5	6	9	15	17	36	53	30	3														
	-5/-1	1											89			-5/-1	1	1	1	4	5	1																	
	0/4	2	5	6	7	5	11	19	22	14	1		92			0/4	3	5	11	10	13	15	30	9	4														
	5/9	1	1	4	2	1	3	3	1				16			5/9	2	2	1	2	2	2																	
	10/14	4	10	9	19	15	26	50	53	26	1		213			10/14	2	2	1	1	1	1																	
1200	TOTAL	4	10	9	19	15	26	50	53	26	1		213			TOTAL	7	11	18	12	22	32	49	20	3														
	-15/-11	1											1			-15/-11	7	11	18	12	22	32	49	20	3														
	-10/-6	1											18			-10/-6	1	3	2	4	5	9	3	1															
	-5/-1	2	1	6	8	9	15	23	26	12	1		103			-5/-1	1	6	12	8	10	18	17	13															
	0/4	3	3	8	5	8	8	15	13	9	1		73			0/4	2	6	7	3	4	7	8	5	1														
	5/9	3	2	1	2	2							15			5/9	1	3	2	1	1	1																	
	10/14	8	8	17	16	25	29	42	44	22	2		213			10/14	2	13	16	23	14	18	30	35	21	4													
1400	TOTAL	8	8	17	16	25	29	42	44	22	2		213			TOTAL	2	13	16	23	14	18	30	35	21	4													
	-15/-11	1											2			-15/-11	2	13	16	23	14	18	30	35	21	4													
	-10/-6	3											35			-10/-6	1	3	2	4	5	9	3	1															
	-5/-1	2	8	8	12	10	8	17	27	10	1		103			-5/-1	1	6	12	8	10	18	17	13															
	0/4	5	3	10	5	5	4	10	8	6			56			0/4	2	6	7	3	4	7	8	5	1														
	5/9	2	3	3	1	2	1	1					15			5/9	1	3	2	1	1	1																	
	10/14	1											2			10/14	2	13	16	23	14	18	30	35	21	4													
	TOTAL	9	15	25	21	24	18	38	41	21	1		213			TOTAL	9	15	25	21	24	18	38	41	21	1													

TABLE XIII.- Continued

(b) Spring

PERIOD: JAN 1956-DEC 1965

ELV: 31 M 48 23N 124 44 W

SEASON: SPRING (MAM)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 00 HR	TOTAL
ABV SFC	INTERVAL	(C)	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	DBS
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99
0	-5/-1				1	1
	0/4			2 1 1 2	6	
	5/9	1	1 4 31 38 34 16	125		
	10/14		1 7 46 73 49 20	196		
	15/19		2 2 3 6 2	15		
	TOTAL	1	4 15 81 118 87 37	343		
200	-5/-1				1	
	0/4		1 2 7 8 5 3 1	27		
	5/9		1 5 27 64 71 46 10	224		
	10/14		2 8 8 17 24 15 3	77		
	15/19		2 4 5 1	12		
	20/24		1 1	2		
	TOTAL		7 20 47 90 100 64 15	343		
400	-5/-1				2	
	0/4		4 3 10 29 22 9 4	81		
	5/9		2 12 27 46 57 44 10	198		
	10/14		7 5 10 10 8 4	44		
	15/19	1 3 6 3 1		14		
	20/24	3 1		4		
	TOTAL	1 19 27 50 86 88 57 15		343		
600	-5/-1				10	
	0/4		1 2 7 13 31 51 27 6	138		
	5/9		10 11 22 22 38 27 6	136		
	10/14	4 7 10 5 3 4 3		36		
	15/19	1 5 2 6 1		16		
	20/24	3 3		7		
	TOTAL	1 13 25 34 44 58 98 58 12		343		
800	-5/-1				32	
	0/4		2 3 9 21 26 57 30 7	155		
	5/9		11 17 23 19 18 10 6	104		
	10/14	6 8 5 5 2 5 1		32		
	15/19	1 5 6 5		17		
	20/24	2 1		3		
	TOTAL	1 13 31 38 55 52 92 47 14		343		
1000	-10/-6				1	
	-5/-1		1 3 5 10 8 23 15 2	67		
	0/4		1 3 7 5 21 30 43 29 12	151		
	5/9		1 5 13 12 13 12 9 9 2	76		
	10/14	1 6 6 8 5 3 2		31		
	15/19	2 6 6 1		15		
	20/24	1 1		2		
	TOTAL	6 20 36 32 49 54 77 53 16		343		
1200	-10/-6				1	
	-5/-1		1 1 2 9 11 12 28 17 3	84		
	0/4		1 5 7 13 26 22 36 22 8	140		
	5/9		2 4 13 10 9 12 12 4 1	67		
	10/14	1 3 8 9 5 2		28		
	15/19	4 2 7		13		
	20/24	1		1		
	TOTAL	9 15 39 41 54 49 79 44 13		343		
1400	-10/-6				22	
	-5/-1		2 1 7 12 11 19 31 25 5	113		
	0/4		1 7 10 19 16 20 20 13 7	113		
	5/9		2 7 13 11 13 6 9 1 1	63		
	10/14	3 6 5 5 4		23		
	15/19	2 1 6		9		
	TOTAL	10 22 43 48 48 47 68 42 15		343		

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) RELATIVE HUMIDITY (%)
 SEASON: SPRING (MAM) TIME (GMT): 00 HR

FREQUENCY OF WEATHER (CODE) FOR SPRING-00 HR
 1 2 3 4 9 8 TOTAL
 56 385 130 140 6 203 920

SEASON: SPRING (MAM)	ALTITUDE	AIR TEMP	RELATIVE	HUMIDITY	TIME (GMT): 12 HR	TOTAL
ABV SFC	INTERVAL	(C)	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	00 10 20 30 40 50 60 70 80 90 100	DBS
(METERS)	(C)	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99	09 19 29 39 49 59 69 79 89 99
0	-5/-1				1	1
	0/4			1 1 12 16	30	
	5/9		1 18 38 100 103	4 264		
	10/14		1 1 11 35 32 2	82		
	15/19		2 20 50 147 152	6 377		
	TOTAL					
200	-5/-1				1	
	0/4		1 11 21 25 8	66		
	5/9		2 5 21 65 127 39	259		
	10/14	1 3 5 3 9 18 7		46		
	15/19	1 1 2		5		
	20/24	2 6 13 35 96 171 54		377		
	TOTAL					
400	-5/-1				1	
	0/4		1 1 3 17 39 55 8	124		
	5/9		2 2 16 30 43 87 30	1 209		
	10/14	2 2 7 5 10 2 5 1		34		
	15/19	1 2		4		
	20/24	1 1		1		
	TOTAL	2 5 12 24 59 87 148 39		377		
600	-5/-1				5	
	0/4		1 4 5 14 69 58 19	170		
	5/9		1 5 15 18 16 28 51 20	149		
	10/14	1 2 5 9 5 5 2		34		
	15/19	1 3 1 1		6		
	20/24	1 1		2		
	TOTAL	1 5 10 29 29 40 107 115 41		377		
800	-5/-1				45	
	0/4		2 1 8 13 17 4	184		
	5/9	1 2 5 9 5 5 2		112		
	10/14	1 1 5 15 23 17 15 25 10		29		
	15/19	2 4 8 6 5 4		6		
	20/24	4 1 1		1		
	TOTAL	1 4 14 32 51 50 89 98 38		377		
1000	-10/-6				4	
	-5/-1		3 1 1 5 8 21 35 14	88		
	0/4		1 9 18 23 14 40 41 27	173		
	5/9		4 5 17 13 15 11 9 3	77		
	10/14	1 4 5 5 6 2 2 1		26		
	15/19	3 3 2 1		9		
	20/24	1 15 23 41 49 42 75 87 44		377		
	TOTAL					
1200	-10/-6				12	
	-5/-1		1 1 3 6 10 10 37 29 15	112		
	0/4		4 10 17 27 26 31 28 18	161		
	5/9	2 4 8 11 19 8 6 4 3		65		
	10/14	3 9 3 3 3		21		
	15/19	3 1 2		6		
	20/24	3 15 31 37 64 48 76 64 39		377		
	TOTAL					
1400	-10/-6				1	
	-5/-1		2 3 5 6 17 21 26 29 20	129		
	0/4		2 8 14 23 22 18 22 16 13	138		
	5/9	4 5 11 10 17 6 3 2 3		61		
	10/14	2 4 1 4		12		
	15/19	1 1 1 1		4		
	20/24	10 19 35 40 64 50 60 56 42		377		
	TOTAL					

ALTITUDE AIR TEMP 00 10 20 30 40 50 60 70 80 90 100 TOTAL
 ABV SFC INTERVAL 09 19 29 39 49 59 69 79 89 99 DBS
 (METERS) (C) RELATIVE HUMIDITY (%)
 SEASON: SPRING (MAM) TIME (GMT): 12 HR

FREQUENCY OF WEATHER (CODE) FOR SPRING-12 HR
 1 2 3 4 9 8 TOTAL
 69 329 138 202 7 1/5 920

TABLE XIII. - Continued

(c) Summer

PERIOD: JAN 1956-DEC 1965

LLV: 31 M 48 23N, 124 44 W

SEASON: SUMMER (JJA)													SEASON: SUMMER (JJA)												
ALTITUDE	AIR TEMP	R E L A T I V E H U M I D I T Y (%)											ALTITUDE	AIR TEMP	R E L A T I V E H U M I D I T Y (%)										
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100
(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	OBS	(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	OBS
TIME (GMT): 00 HR													TIME (GMT): 12 HR												
0	5/ 9												0	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
TOTAL	TOTAL												TOTAL	TOTAL											
200	5/ 9												200	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											
400	5/ 9												400	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											
600	5/ 9												600	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											
800	5/ 9												800	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											
1000	5/ 9												1000	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											
1200	5/ 9												1200	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											
1400	5/ 9												1400	5/ 9											
10/ 14	10/ 14												10/ 14	10/ 14											
15/ 19	15/ 19												15/ 19	15/ 19											
20/ 24	20/ 24												20/ 24	20/ 24											
25/ 29	25/ 29												25/ 29	25/ 29											
TOTAL	TOTAL												TOTAL	TOTAL											

FREQUENCY OF WEATHER (CODE) FOR SUMMER-00 HR

1 2 3 4 9 8 TOTAL

61 309 59 311 3 177 920

FREQUENCY OF WEATHER (CODE) FOR SUMMER-12 HR

1 2 3 4 9 8 TOTAL

120 221 77 356 8 138 920

TABLE XIII. - Concluded

(d) Fall

PERIOD: JAN 1956-DEC 1965

ELV: 31 M 48 23N, 124 44 W

SEASON: FALL (SDN)													SEASON: FALL (SDN)												
ALTITUDE	AIR TEMP	REL	AT	IVE	HUM	ID	ITY	TIME (GMT):	00	HR			ALTITUDE	AIR TEMP	REL	AT	IVE	HUM	ID	ITY	TIME (GMT):	00	HR		
ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	100	ABV SFC	INTERVAL	00	10	20	30	40	50	60	70	80	90	
(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	OBS	(METERS)	(C)	09	19	29	39	49	59	69	79	89	99	
0	0/ 4					1	1	1				3	0	0/ 4					1	3	1	1		6	
	5/ 9					2	5	6	15	16	5	49		5/ 9					2	1	17	31	48	11	
	10/ 14					3	11	38	85	59	4	200		10/ 14					2	1	11	43	87	13	
	15/ 19					1	4	7	21	24	6	63		15/ 19					1	2	2	5		10	
	20/ 24					2						2		20/ 24					2	4	33	77	141	24	
	TOTAL					3	15	25	75	125	70	4	317		TOTAL				2	4	33	77	141	24	
200	0/ 4					1	5					11	200	0/ 4					1	6	25	46	26	104	
	5/ 9					5	3	15	29	21	2	75		5/ 9					1	4	4	30	53	52	
	10/ 14					1	4	8	29	50	61	32	185		10/ 14				1	1	5	2	2	1	
	15/ 19					3	5	6	11	9	5	2	41		15/ 19				1						
	20/ 24					2	1	2				5			20/ 24				1	1					
	TOTAL					6	16	24	55	90	89	37	317		TOTAL				1	3	12	16	60	105	
400	0/ 4					3	4	2	4	6	1	20	400	-5/ -1					1						
	5/ 9					6	7	16	35	31	8	103		0/ 4					1	3	4	6	9	1	
	10/ 14					1	1	7	15	26	45	35	148		5/ 9				1	14	33	49	23	120	
	15/ 19					7	8	9	10	3	3	40		10/ 14					1	3	11	17	17	42	
	20/ 24					2	3	1				6		15/ 19					2	4	3	1	3	3	
	TOTAL					1	10	27	36	54	87	75	317		20/ 24				2	1	1				
600	-5/ -1					1	1					2	600	-5/ -1					5	10	19	36	59	103	
	0/ 4					6	4	6	12	11	2	41		0/ 4					1	2	2	6	15	16	4
	5/ 9					1	4	11	16	39	31	9	111		5/ 9				1	2	6	15	16	4	
	10/ 14					1	1	4	10	16	19	35	25		10/ 14				1	7	14	18	47	30	
	15/ 19					2	12	9	9	2	1	1	36		15/ 19				1	5	3	3	1	1	
	20/ 24					1	4	1				6			20/ 24				1	2	2				
	TOTAL					1	4	21	31	41	43	87	68		TOTAL				2	15	13	28	33	54	
800	-5/ -1					1						9	800	-5/ -1					1	1	1	1	2	2	
	0/ 4					2	4	7	7	20	13	1	53		0/ 4				1	3	8	14	23	9	
	5/ 9					1	3	4	16	19	31	27	15		5/ 9				3	11	19	22	42	18	
	10/ 14					1	1	9	12	18	19	20	15		10/ 14				3	3	10	8	14	18	
	15/ 19					2	16	7	7	3		35		15/ 19					3	5	7	1			
	20/ 24					1	3	1				5			20/ 24				2						
	TOTAL					1	6	33	28	50	50	73	56		TOTAL				9	8	25	23	43	55	
1000	-5/ -1					1						16	1000	-10/ -6					1	2	1				
	0/ 4					1	4	3	6	6	20	17	4		-5/ -1				1	2	5	3	3		
	5/ 9					1	3	6	9	18	18	28	16		0/ 4				1	4	5	8	21	22	
	10/ 14					2	6	7	16	8	13	12	8		5/ 9				4	5	8	21	22	36	
	15/ 19					1	6	16	8	4	2	37		10/ 14				2	5	8	6	9	10	8	
	20/ 24					2	2	1				5		15/ 19				1	5	7	2	1	2		
	TOTAL					5	17	35	37	40	43	65	50		20/ 24				1	1	1				
1200	-10/ -6					1						1	1200	-10/ -6					5	11	20	19	23	46	
	-5/ -1					1	2	5	4	3	16	22	8		-5/ -1				1	2	4	8	14	5	
	0/ 4					1	2	5	4	3	16	22	8		0/ 4				1	2	4	8	14	5	
	5/ 9					3	2	9	10	17	14	29	19		5/ 9				1	6	3	7	11	13	
	10/ 14					2	10	16	14	17	12	4	3		10/ 14				2	3	7	14	24	18	
	15/ 19					1	5	9	3	4	1				15/ 19				3	7	9	6	10	13	
	20/ 24					2						2			20/ 24				1	6	5	1	2		
	TOTAL					7	19	42	33	47	48	62	37		TOTAL				5	16	24	20	37	48	
1400	-10/ -6					1						43	1400	-10/ -6					1	3	1				
	-5/ -1					5	1	5	2	10	12	2	2		-5/ -1				6	2	2	4	12	13	
	0/ 4					5	2	4	12	15	17	10	7		0/ 4				2	5	3	10	9	11	
	5/ 9					5	9	12	15	8	16	17	19		5/ 9				4	3	7	6	16	14	
	10/ 14					2	12	11	16	12	5	6	2		10/ 14				5	7	6	12	14	5	
	15/ 19					1	8	7		2	1				15/ 19				2	6	4	1	2		
	20/ 24					1						1			20/ 24				13	21	26	25	45	32	
	TOTAL					13	33	37	38	39	47	49	43		TOTAL										
ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90	100	TOTAL	ALTITUDE	AIR TEMP	00	10	20	30	40	50	60	70	80	90
ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	OBS	ABV SFC	INTERVAL	09	19	29	39	49	59	69	79	89	99	
(METERS)	(C)	RE	LA	T	I	V	E	H	U	M	I	D	I	T	(METERS)	(C)	RE	LA	T	I	V	E	H	U	M
SEASON: FALL (SDN)	TIME (GMT): 00 NR												TIME (GMT): 00 NR	SEASON: FALL (SDN)	TIME (GMT): 00 NR										

FREQUENCY OF WEATHER (CODE) FOR FALL -00 HR
 1 2 3 4 9 8 TOTAL
 32 421 136 164 4 153 910

FREQUENCY OF WEATHER (CODE) FOR FALL -12 HR
 1 2 3 4 9 8 TOTAL
 49 421 150 165 8 116 909

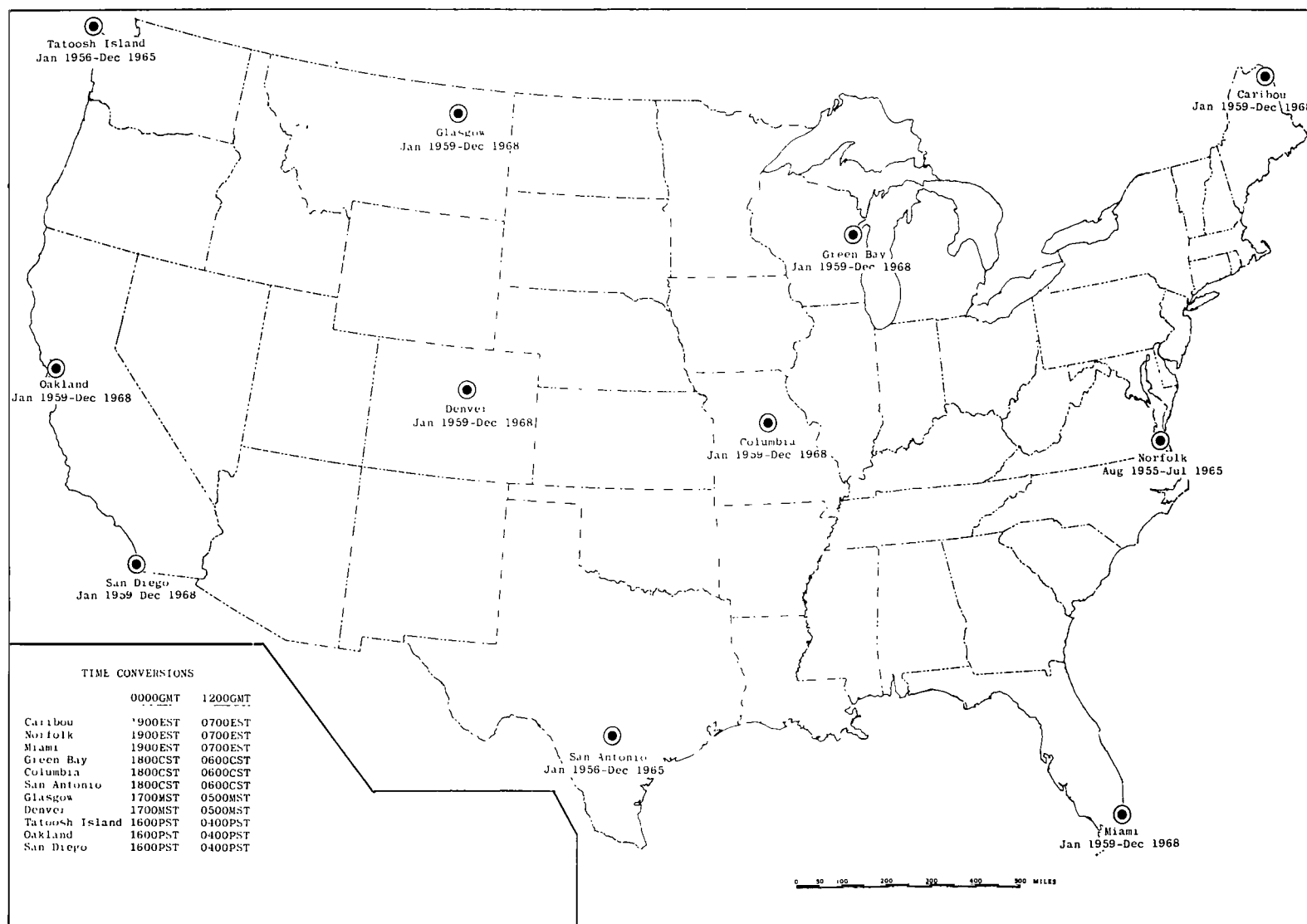
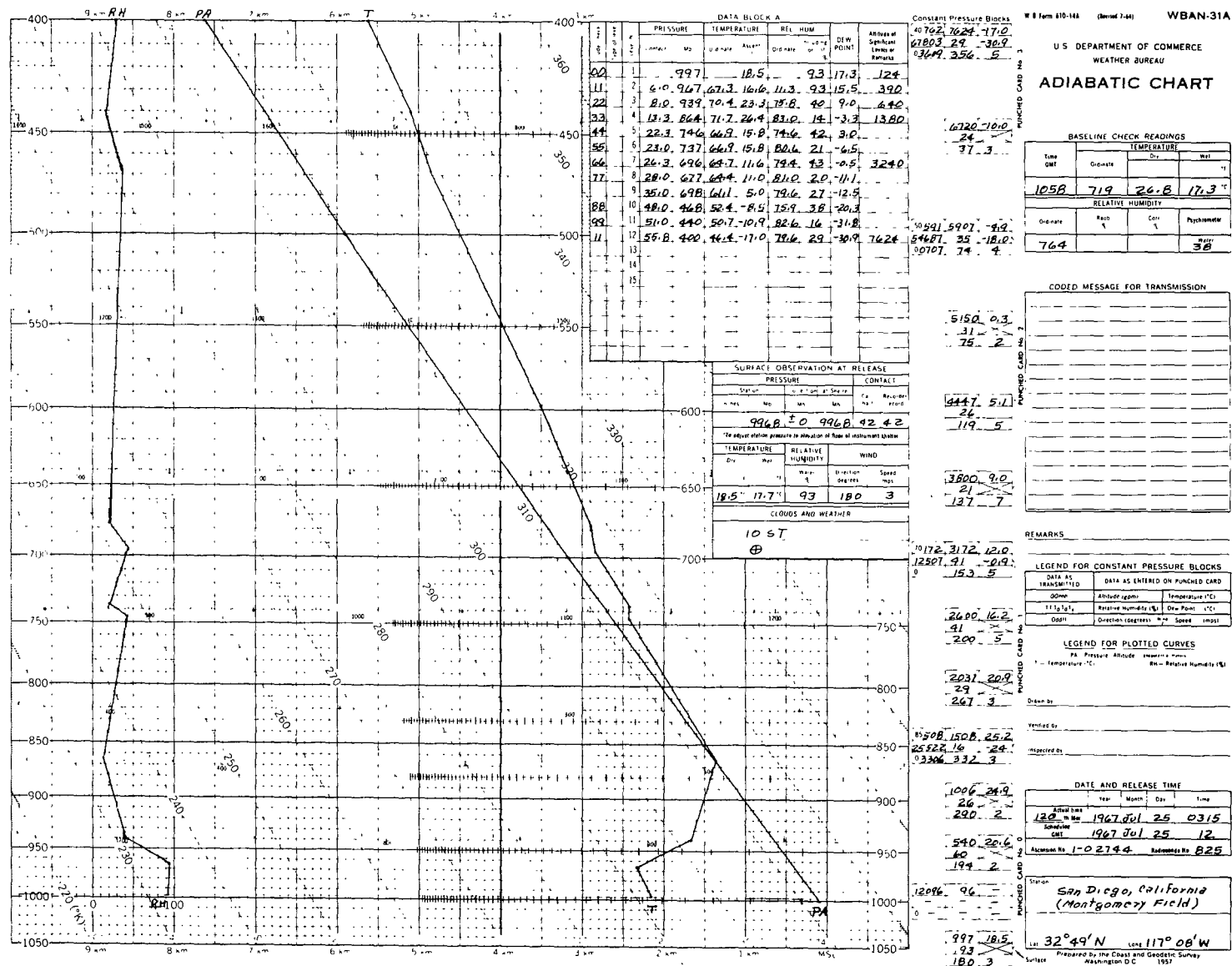


Figure 1.- Map showing distribution of sites selected for analysis.



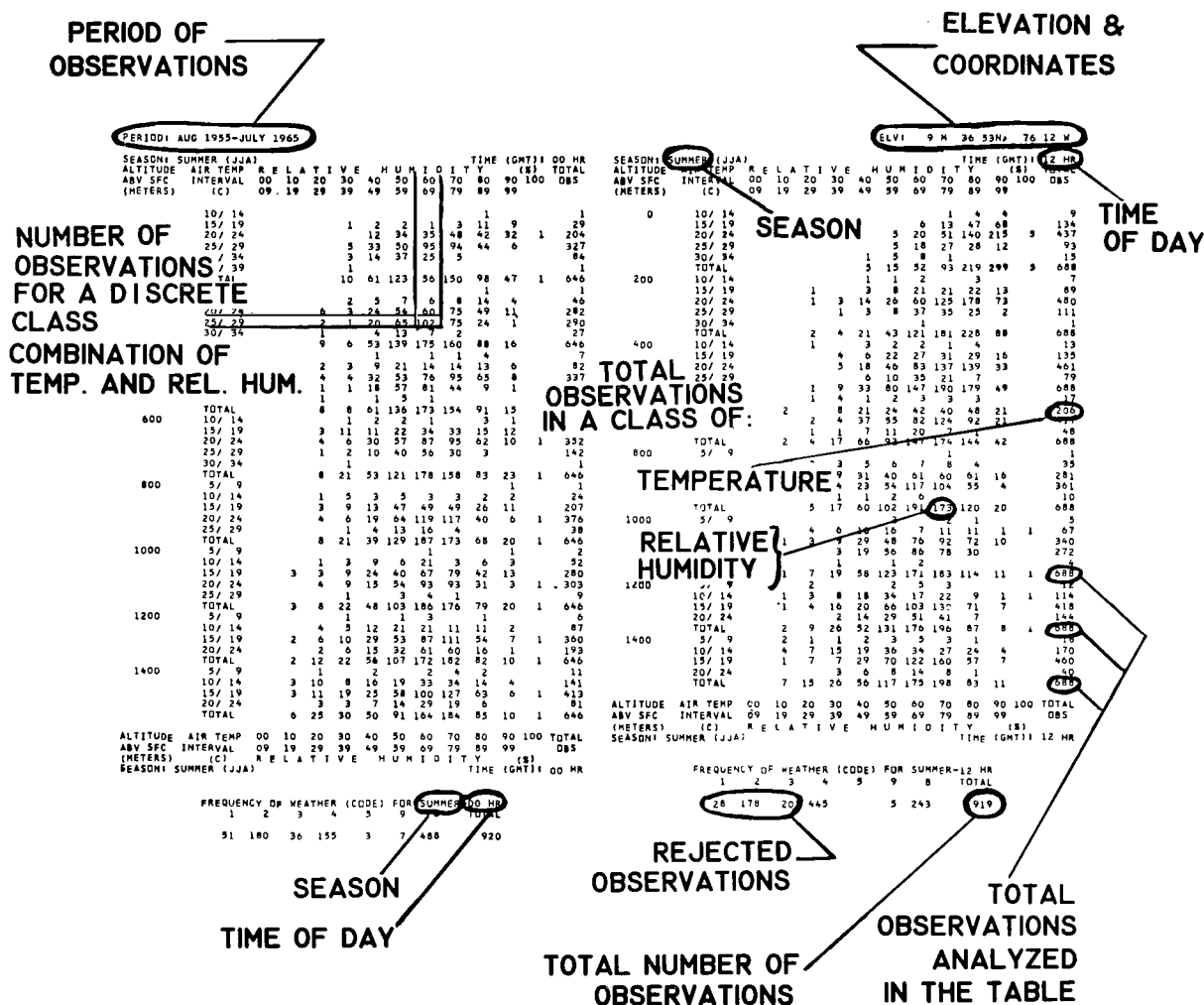


Figure 3. - Example table from the set of 44, showing distribution of temperature and relative humidity by location, time of observation, and altitude compared with the total number of observations. Codes for selection or rejection are described in the body of the text.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

**SPECIAL FOURTH-CLASS RATE
BOOK**

POSTAGE AND FEES PAID
NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION
451



757 001 C1 U E 750718 S00903DS
DEPT OF THE AIR FORCE
AF WEAPONS LABORATORY
ATTN: TECHNICAL LIBRARY (SUL)
KIRTLAND AFB NM 87117

POSTMASTER: If Undeliverable (Section 158
Postal Manual) Do Not Return

"The aeronautical and space activities of the United States shall be conducted so as to contribute . . . to the expansion of human knowledge of phenomena in the atmosphere and space. The Administration shall provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof."

—NATIONAL AERONAUTICS AND SPACE ACT OF 1958

NASA SCIENTIFIC AND TECHNICAL PUBLICATIONS

TECHNICAL REPORTS: Scientific and technical information considered important, complete, and a lasting contribution to existing knowledge.

TECHNICAL NOTES: Information less broad in scope but nevertheless of importance as a contribution to existing knowledge.

TECHNICAL MEMORANDUMS: Information receiving limited distribution because of preliminary data, security classification, or other reasons. Also includes conference proceedings with either limited or unlimited distribution.

CONTRACTOR REPORTS: Scientific and technical information generated under a NASA contract or grant and considered an important contribution to existing knowledge.

TECHNICAL TRANSLATIONS: Information published in a foreign language considered to merit NASA distribution in English.

SPECIAL PUBLICATIONS: Information derived from or of value to NASA activities. Publications include final reports of major projects, monographs, data compilations, handbooks, sourcebooks, and special bibliographies.

TECHNOLOGY UTILIZATION PUBLICATIONS: Information on technology used by NASA that may be of particular interest in commercial and other non-aerospace applications. Publications include Tech Briefs, Technology Utilization Reports and Technology Surveys.

Details on the availability of these publications may be obtained from:

SCIENTIFIC AND TECHNICAL INFORMATION OFFICE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Washington, D.C. 20546